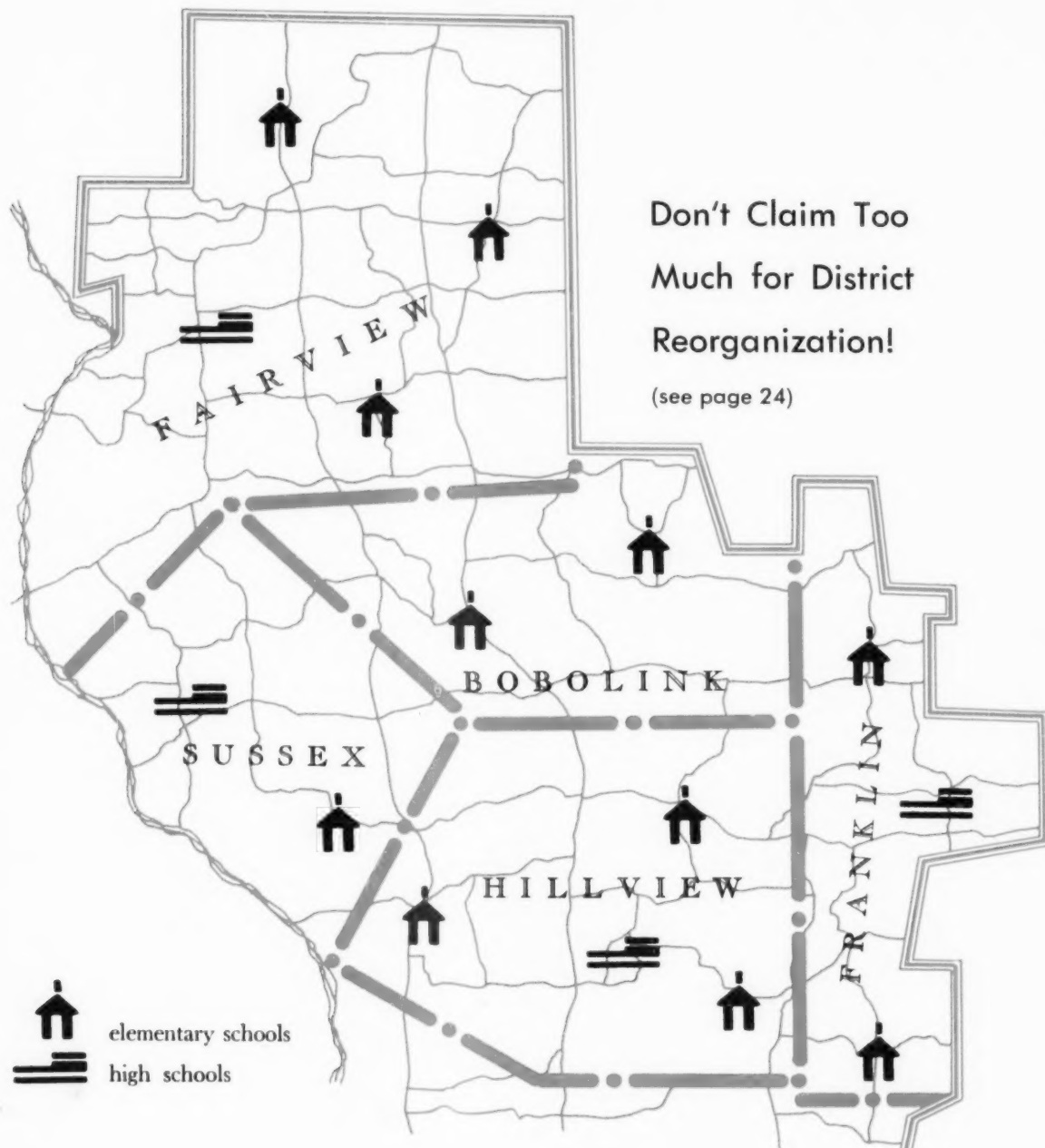


april, 1959

the
AMERICAN
SCHOOL BOARD
JOURNAL

a periodical of school administration



the sad case of Professor Dunkle

OR ... WHO WANTS TO REPLACE HIM?



Dunkle taught Economics in Room 10 for twenty-six years. After five years, he had a definite squint. On his twentieth anniversary, he asked boldly for softer lights and more of them. But the school was "economizing".

Room 10 wore the air of a tomb. Dunkle's eye trouble forced him to draw the blinds against the sun, and the lights were so high up they did nothing but shine brightly at the ceiling. Students who sometimes awakened saw only spots before their eyes.

Finally, poor Dunkle had to resign, seven years before his time — a victim of poor lighting!

At the last Board meeting, everyone asked—"WHOM can we get to teach in Dunkle's room?"

*They have since discovered the answer: **NOBODY!***

MAKE SCHOOL DAYS **HAPPY DAYS** IN YOUR SCHOOL.
INSTALL SIGHT-**SAVING GUTH** LIGHTING NOW!

Write for name of your nearest Guth Lighting Specialist.
He'll help you work out a **plan**.

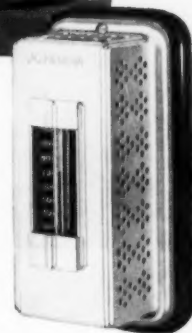
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Up to date provisions for the regulation of heating and ventilation make important contributions to the efficiency of this modern school in Cranston, Rhode Island.

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The control system also keeps down operating expenses through more efficient operation of the heating and ventilating systems. It prevents overheating, eliminates needless fuel waste and reduces heating costs. Additional savings are made by shutting off the ventilation and maintaining a reduced economy temperature when the building is unoccupied.

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When you build or modernize, a nearby Johnson engineer will welcome the opportunity to cooperate with you, your consulting engineer or architect in applying the unmatched comfort and economy features of a Johnson Pneumatic Control System. Johnson Service Company, Milwaukee 1, Wisconsin. Direct Branch Offices in Principal Cities.

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April, 1959

the AMERICAN SCHOOL BOARD JOURNAL

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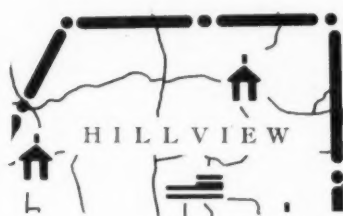
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OUR COVER...

While there are many and real gains achievable through school district reorganization, many proponents attribute the wrong objectives and the wrong advantages to the consolidation process. The cover article discusses (pg. 24) some of the more grievous misconceptions that we should all recognize and seek to avoid as we realign our districts for improved educational programs.

A review of your JOURNAL for April (pg. 6) →

WILLIAM C. BRUCE, Editor

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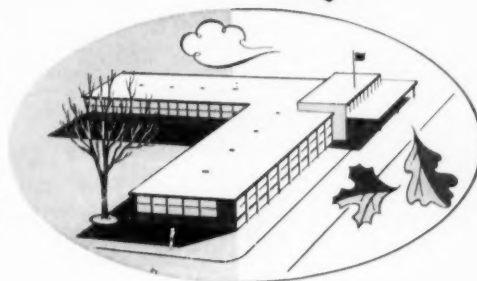
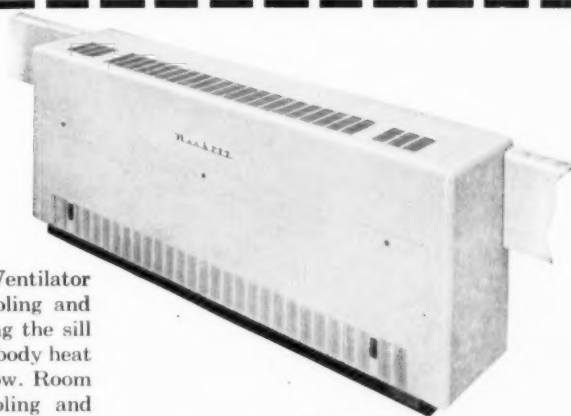
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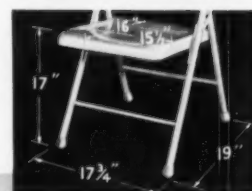
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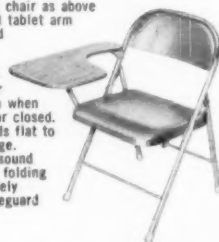
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Your JOURNAL for April

In a time of intense controversy over the schools, when headlines in daily papers and in popular and news magazines focus the popular attention on many school "issues" (frills, palaces, teacher and classroom shortages, etc.), it is important for school directors and administrators to view these debates in proper perspective to the direction of their local schools.

In your JOURNAL for April, we've featured an analysis (pg. 30) of the real meaning of current school controversies, the meaning of the polls and surveys that critics and "educationalists" quote to substantiate their claims, and the meaning of the effects of these conflicts and polls on public opinion.

Interested in school building economy? A free copy of Boles' "Sources of School Building Economy," which appeared in the May through December, 1958, issues of your JOURNAL, will be sent to you. Use the addressed, postpaid Reader's Service Section (pg. 77) to order your copy! (Additional copies are available at 25 cents each; orders of 10 or more, 20 cents each.)

And this analysis provides a guide as to how these arguments should affect the policy making for, and the administration of, your district's schools!

And there are several other features this month which we'd especially like to bring to your attention:

1. Grouping of students, regarded as one of the keys to successful individualization of instruction, is considered in a report (pg. 21) on one school's experiments with both intraclass and interclass grouping — with details on pupil selection, teacher placement and training, advantages and problems, etc.

2. How Cincinnati has evaluated the results of its television-aided classroom instruction in relation to conventional approaches is reviewed (pg. 27) in the third and final part of the comprehensive report of this system's pioneering efforts in the instructional uses of ETV.

3. A survey (pg. 36) of recent school construction (a science building, a gymnasium addition, an administration center) illustrates "special" school buildings designed for specific needs.

While these come to mind as articles which should be interesting to you, we hope you'll have a chance to read through the entire issue — noting the regular monthly departments, especially the Association News column which has an account (pg. 33) of the highlights of the 1959 AASA convention.

The Editor

for May...

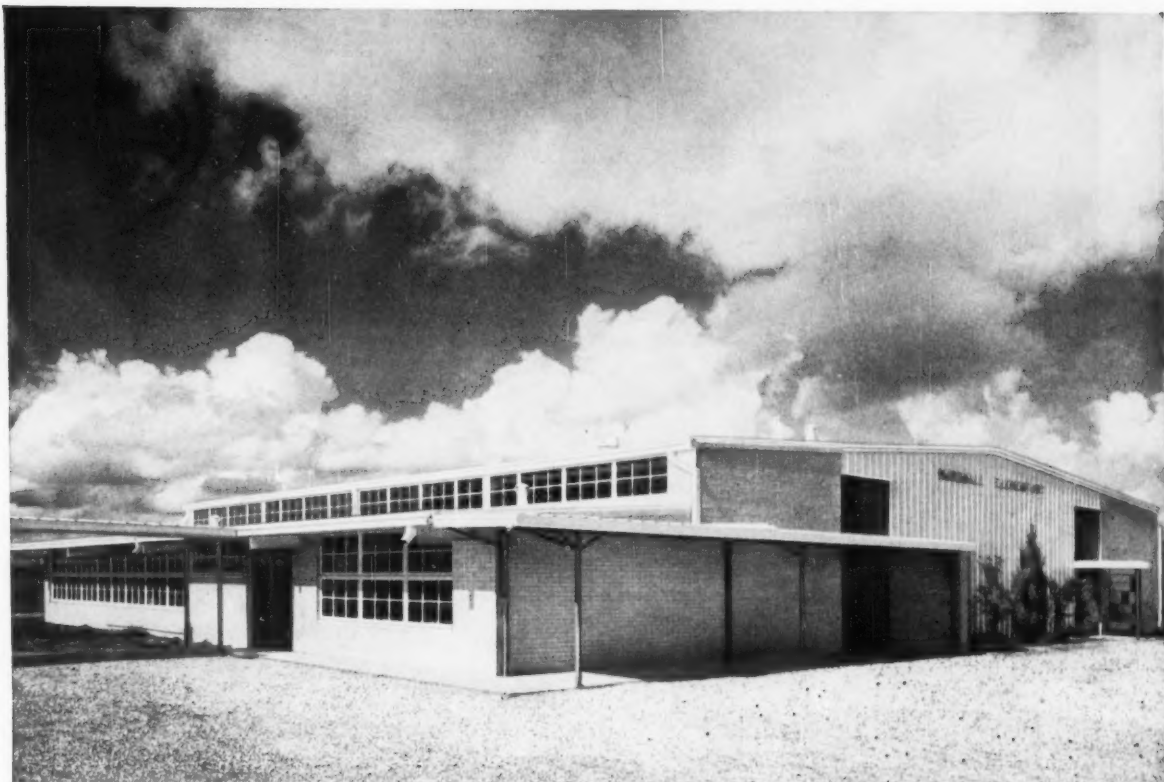
Our country's manpower problem, dictated by survival in our technological age, has implications for our schools and their guidance programs. Dr. H. H. London, president of the American Vocational Association, has some vital comments on these implications.

SUBSCRIPTIONS. In the United States, Possessions, and Canada, \$4.00 a year, payable in advance. Two-year subscriptions will be accepted at \$6.00. In all foreign countries, \$5.00, two years at \$8.00. Single copies, 50 cents.

DISCONTINUANCE. Notice of discontinuance of subscription must reach the Publication Office in Milwaukee at least 15 days before expiration date.

CHANGE OF ADDRESS. When you have a change of address kindly report it to us at once. Send us your old as well as your new address and be sure the Postmaster is notified. Postal regulations restrict forwarded service on magazines to two issues only.

EDITORIAL MATERIAL. Manuscripts and photographs bearing on school administration, superintendence, school architecture, and related topics are solicited and will be paid for upon publication. Contributions should be mailed to Milwaukee direct and should be accompanied by return postage if unsuitable. The contents of this issue are listed in the "Education Index."



A school like this gets straight A's

Butler schools rate high with teachers, school board members and taxpayers. Here's why:

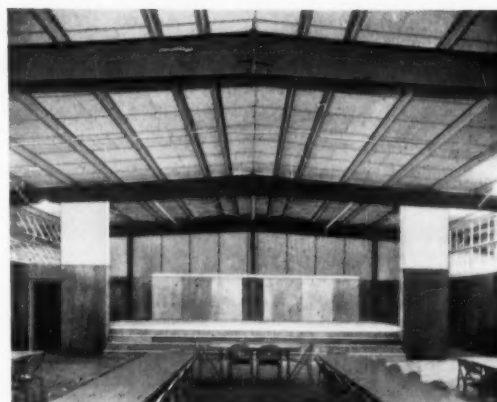
Teachers like the spacious, open rooms that result from Butler's column-free, truss-free building design. They like the excellent ventilation and illumination characteristics that create a cheery, pleasant atmosphere for teachers and pupils alike.

Board members like Butler schools because they know that the all-steel structural frame and roof system create a strong, permanent building that requires a minimum of maintenance.

And *taxpayers* appreciate the savings that result from building with pre-engineered, economically mass-produced Butler building components.

Before your community invests a single dollar in school construction, get the full story on the Butler Building System from your local Butler Builder. He's listed in the Yellow Pages of your phone book under "Buildings" or "Steel Buildings."

Or write directly to us for your free copy of the booklet—
"A New Solution to the Problem of School Construction . . ."



A low-profile Butler building with a lean-to on both sides was used to create the Marshall Elementary School pictured on this page. The simple, yet attractive exterior was accomplished economically by combining low-cost Butler panels with curtain walls of brick. The functional cafeteria (above) at the Marshall Elementary School is a good example of the spacious, column-free interiors that Butler's clear span design makes possible.



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Above: Main court, photo taken from study hall and cafeteria area in photo below.

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Lower Maintenance Cost—25 to 40 years of dependable control with a minimum of repairs are often reported by Powers users. Ten miles from Ferndale in the old Central High School Building in Detroit, Powers thermostats are still in operation after more than 50 years of service.

Powers Complete Responsibility—for a correctly engineered control system, proper installation, continuous successful operation and **SERVICE** when required from offices in 85 cities.

Dual purpose Cafeteria and Study Hall area





Above: Modern Library and Science laboratory.

Below: Three of the 12 booths in the Language Laboratory, one of the first of its kind in the United States. Earphones, microphones, tape recorders and phonographs play an important role in teaching foreign languages.



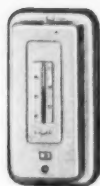
Below: Band Practice Room.



One of the two large swimming pools.

(D-7)

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225 Thermostats are used here. The forced hot-water heating system has indoor-outdoor control in zones, 124 unit ventilators in classrooms have independent day control. Larger areas are supplied by 18 different fan systems. The building is divided into 8 temperature control zones, each with a control panel for manual or automatic selection of control cycles.

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Surveying the School Scene

news notes
of special
interest

SCHOOL BUS TRAGEDY

Nine children (ages ranging from 7 to 14) drowned in a roadside pond near Tifton, Ga., when the school bus in which they were riding hit two bumps on a country road under construction and careened into the pond described as "from four to five feet deep."

About 40 of the 60 students from Wilson High and Industrial Elementary School were hospitalized.

VIRGINIA INTEGRATION RESISTANCE

In Front Royal, Va., 22 Negro students began their first day of studies in the Warren County High School, with 10 teachers and 30 classrooms at their disposal, but not a single white classmate. Fourteen girls and eight boys split up in groups as small as two and three in the huge building which accommodates 1000 students. The school was reopened under federal court orders and police

were on duty to keep out all but students and teachers.

About 800 white children continued their classes downtown in a private system utilizing churches and other buildings.

SCHOOL REVENUES

The latest report of the Census Bureau on government revenues indicates that the 50,446 school districts in the United States had a total revenue of \$8,897,000,000. During the same period the total expenditures were \$9,644,000,000. The school districts had a total indebtedness of \$9,620,000,000 and had cash and other security holdings of \$3,571,000,000.

FLEMMING DEFENDS SCHOOL BILL

In reply to charges that the Administration's school construction bill is an "inadequate package," HEW Secretary Arthur S. Flemming stated that the bill "will give some needy school districts some schools that they otherwise would not have."

The Administration's bill provides for construction of 75,000 classrooms over the next five years through Federal-State payment, on a 50-50 basis, of the debt service over the next 25 years. The eventual cost to the Government would be \$2.1 billion.

The bill is competing with the Murray-Metcalf bill, drafted by the NEA to support teachers' salaries and classroom construction.



The NEW WAY to TEACH 5 Classes in 1 Room!



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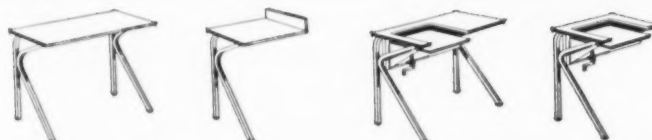
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GOOD HIGH SCHOOLS AND GOOD BOARDS

"In spite of the complexities of the problems (of our high schools), there are a few simple guides for citizens who are concerned with their local high school. First of all a good school board is essential. A school board should be composed of honest, devoted, intelligent citizens who realize the difference between policy-making and administration—and who resist all temptations to become involved in matters that should be left to the superintendent and principal." — *Conant in Look*.

NIGHT SCHOOLS REOPEN

The evening high school teachers of New York City, who left their jobs on February 2 in a wage dispute, have accepted a new salary and voted to go back to work. Instead of teaching three hours a night for two nights at \$24.50, the teachers will teach three and one-half hours a night twice a week and receive \$36.75. The new plan is based on six 35-minute class periods. Teachers will get \$12.25 for the first four sessions and \$6.13 for the two others, an average of \$18.38 a night.

PRAYER IN SCHOOL

A suit to test the constitutionality of morning prayer in the public schools of Mineola, N. Y., has been started in the local Supreme Court. The action was brought on behalf of five residents of the district who asserted that the use of the prayer violates the principle of separation of Church and State. The prayer was recommended for use in the schools by unanimous vote of the New York Board of

(Concluded on page 67)




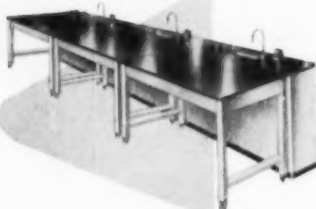
HOW SAFE SHOULD A SCHOOLHOUSE BE?

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PROS AND CONS

Teacher Utilization

Dr. Kowitz has a sensible article in your February, 1959, issue. He clearly points out that the relationship between the teacher and the teacher's aide is extremely difficult. I think the cause lies in the desire of every human being to gain status and save face. Some teachers will see the aide as a threat to status and so may use artificial means to mark the difference between a truly professional person, herself, and a nonprofessional person, the aide. Her manners and her whole attitude may become stilted, unnatural, she might put on an act, get "teacher-ish," preachy, bossy, and so spoil everybody's appetite.

The consequence is tension, confusion between aide and teacher, petty angers, an unwholesome classroom, bad for children.

This status-getting phenomenon is not limited to teachers. It affects all human beings—anyone who is on the spot. It frequently is found between doctors and nurses; it is often present in hospitals between nurses and nurses' aides. It explains the company manners that "mamma" puts on when for the first time she attends the ladies' aid in the stylish church she has just joined.

I also agree with his contention that academic achievement and personal adjustment or maladjustment must go forward together. One of the horrible mistakes being made in educational circles now—and in lay circles perhaps more than in educational circles—is the tendency to view these two concepts as mutually exclusive. They aren't opposites at all. They move together in every classroom.

Dr. William H. Kilpatrick put it beautifully a number of years ago in his differentiation between primary and concomitant learnings. Primary learnings are the things taught in arithmetic: two and two make four. Concomitant learnings are the attitudes, the feelings, the impressions that inevitably accompany the teacher's attempt to develop the primary learning. Concomitants are such things as dislike or affection for the teacher and for all figures of authority, attitudes of honesty or dishonesty developed by the way the work is done, the liking or a disliking of school work, and, consequently, an attitude toward work in general, a feeling of healthy satisfaction if the primary learning is achieved, and a feeling of frustration and a tendency to become a chronic failure if the primary learnings are not reasonably well achieved.

I think that if we had to choose between successfully teaching the primary learnings and cultivation of mental health, we'd pretty nearly have to choose mental health.

Fortunately, the two learnings are not opposites. They go together. And the sooner school boards, school administrators, teachers, children, parents, and school patrons know this, the better off we'll all be.

Earl H. Hanson

Superintendent, Rock Island, Ill., Schools

Claridge

Chalkboard & CORK Bulletins

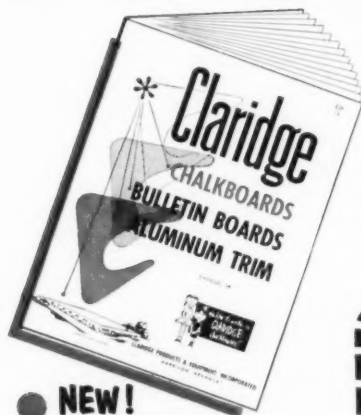
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For this reason, it is necessary to realize that, in most cases, you can build a *better school for less money*—if you include modern air conditioning. This is because a building planned for air conditioning is more compact.

**Today, more than ever before,
there is a need for modern
air conditioning in our schools.**

In many cases, constructing an air conditioned school building saves enough dollars to *pay for the air conditioning equipment itself*. On the other hand, it only requires a mere 3.9% increase in teaching efficiency to *pay for complete year-round air conditioning*.

Studies show that because of body heat and the sun's rays it takes outside air of less than 60 degrees to adequately cool a school building without air conditioning. When outside air is more than 60 degrees, classrooms are sure to be uncomfortable.

Below are some Government figures showing the percentage of school-year classroom hours, in various cities, when the temperature is *above sixty degrees*.

These, then, are the percent-

CITY	% classroom time, during the regular school year, that temperature is above 60 degrees
LOS ANGELES.....	86%
DALLAS.....	62%
WASHINGTON, D. C.....	44%
ST. LOUIS.....	43%
CLEVELAND.....	34%
CHICAGO.....	32%
MINNEAPOLIS.....	25%

ages of classroom time when air conditioning is *vital*, if adequate efficiency in teaching and learning is to be maintained in the school building. Of course, these figures do *not* include the important summertime, when our schools are being used more and more each year.

More advantages of air conditioning

Besides the economic advantages of an air conditioned school, there are numerous other important benefits. First, and most important, is the *increased efficiency* of both faculty and students. This means better teaching—better learning. It can also result in less absenteeism.

Another important benefit is *cleanliness*. A cleaner atmosphere is a more productive atmosphere



—more conducive to learning. It also means a substantial saving on cleaning and maintenance bills.

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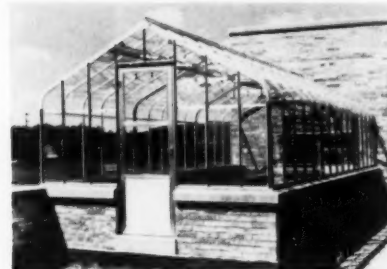
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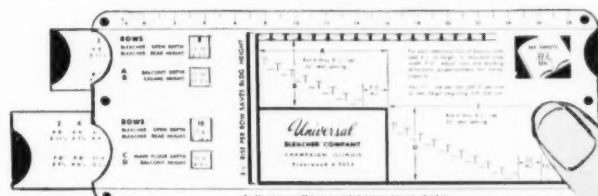
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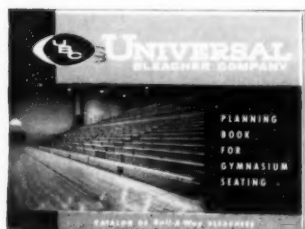
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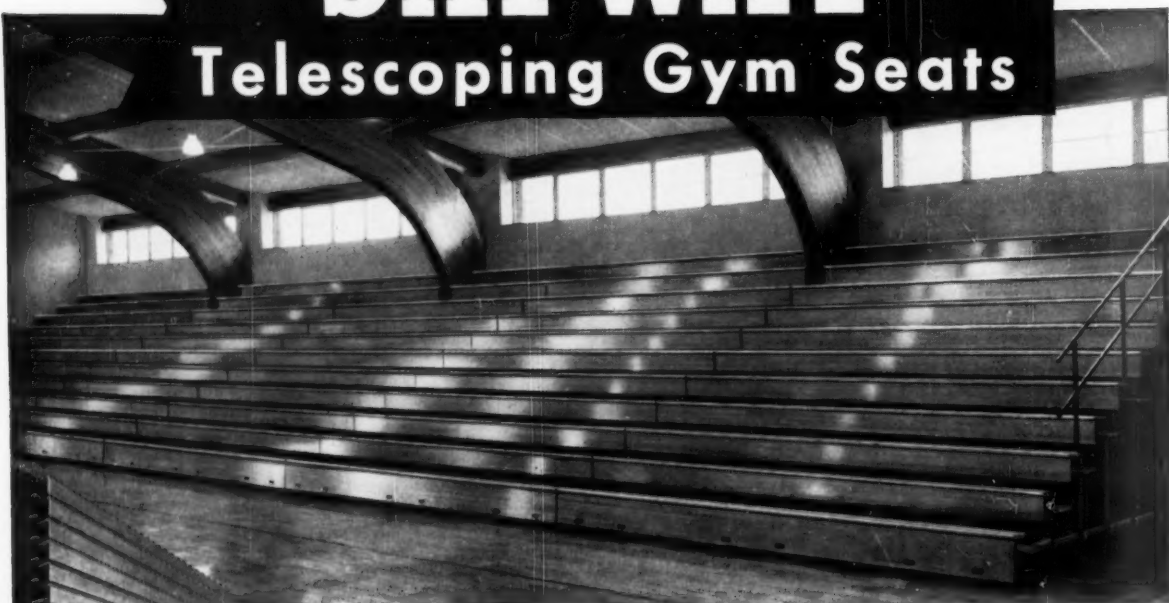
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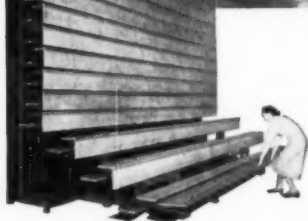
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**AMERICAN
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JOURNAL**

April, 1959

Groping With Grouping

For many years Tampa's Twin Lakes Elementary School, with an enrollment ranging from 600 to 1400 students, has experimented with grouping by classes as well as grouping within each class. Of the two types, grouping by rooms seems to have paid more handsome educational dividends.

The Mechanics of Selection

Past performance has been the basis of selecting students for the several classes in each grade (each grade level has six or more grouped classes). The intelligence quotient is considered along with the results of achievement tests. The opinions of the students' former teachers, however, are the greatest factors of determination.

It is not too difficult to select the students with the most pronounced problems; neither is 't too hard to select a class of fast learners. The in-between groups are the hardest to select. In many cases, a student will fit equally well in one of two sections.

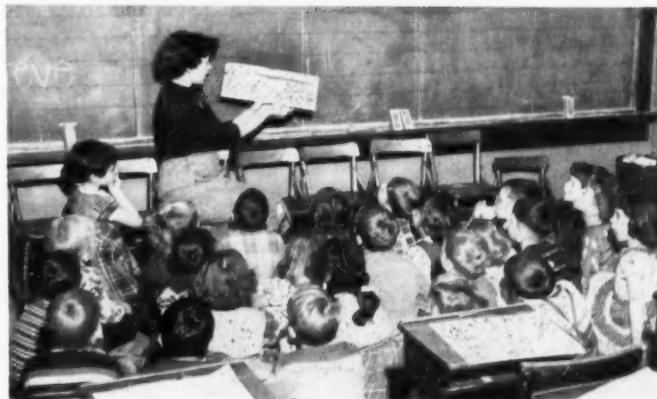
Once the students have been selected for the classes, the transferring of pupils from one division to another during the year is the exception rather than the



A report on one school's experiments with intraclass and interclass grouping, one of the basic keys to successful programs in individualized instruction —

OMAR C. MITCHELL

Principal, Twin Lakes
Elementary School,
Tampa, Fla.



practice. There are, however, occasional personality clashes that demand a change. We have found that inexperienced teachers tend toward making entirely too many changes during the year, and no transfers should be made without the approval of the principal.

When new students are enrolled during the year, they are placed in the rooms of the grade chairmen a few days for evaluation. We obtain all the records possible; then the new students are placed in the rooms to which they seem best fitted.

The reshuffling of classes is done at the beginning of the year, the time when most of the necessary transferring from one division to another takes place.

It is equally important to select the right teachers. Poorly selected teachers in a grouping program will wreck the system before it is started. In addition, alternating the teachers each year is most unsatisfactory.

Teachers for the Slow Learners

Few teachers seem to be willing to accept the lower group, and when they do, it is occasionally with reluctance. A few teachers are receiving special college training for teaching children with pronounced problems. The teacher of the slow division should have an abundance of patience and love, and have an understanding of mental health. Once a teacher is selected, and he proves to be successful, he should continue to teach in the slow division. These specially trained teachers seem to get great satisfaction in assisting the children to overcome their handicaps. A teacher's philosophy, personality, and training are important elements in this area of education.

Perhaps the greatest of all obstacles to overcome in grouping is the branding of the slowest class as mentally deficient children—a group of “dumbbells.” Neither child nor parent appreciates this stigma. This division should be considered by each staff member as a group of children with problems—a group that needs guidance. These children may have more native ability than some placed in the average or higher achievement classes. Their poor achievements can be attributed to the fact that they have avoided difficult mental plowing.

While it should be added that the class of weakest performers is not necessarily a class of low I.Q., children. Most of the low I.Q.'s seem to fall in this division. However, there will be quite a sprinkling of children who have perfectly normal I.Q.'s, but whose achievement, because of various factors, is substandard. We find that these children are happier and their parents are better satisfied in interclass grouping. The individual student's problems are

not noticed nearly as much by his room peers as they are in a “hodgepodge-grouped” class. Many of the tensions, frustrations, and the feelings of depression are greatly reduced and the children are better adjusted socially.

Teachers for the Gifted

The selection of the teacher for the bright and gifted group is also of paramount importance. At the end of the year, his group should show at least a year's progress. If no more than a year's progress is shown, the educational accomplishments are far from the maximum possibilities. (As a case in point, last year our fifth-grade fast performers' median advanced from 6.6 to 8.3, an achievement of one year and seven months.)

Even though the desirable qualities of teachers are printed in many places in the selection of teachers of the gifted, perhaps the quality of energy heads the list. A broad background, ability to do research, an inquiring mind, the ability to stimulate and inspire, the ability to speak at least one foreign language, and an appreciation of the group are also desirable factors. But to get 40 little “live wires” well grounded, the teacher of the gifted should be a human dynamo.

In the selection of the class of best performers, we find our present I.Q.'s ranging from normal to the gifted classification. We have six teachers in our present fifth grade with a total enrollment of 215 students. In the class of the 39 fastest performers, the ranges of intelligent quotients according to the California Mental Maturity Tests are as follows: 90 to 110 I.Q., 9 students;

110 to 120, 10; 120 to 130, 10; 130 to 145, 5; 140 to 150, 4; and 150 to 160, 1.

It is interesting to note that nine students are within the average I.Q. range; these students have high achievement records in addition to excellent reports by their former teachers. It is also an interesting fact that 17 students with I.Q.'s ranging from 111 to 140 are in the second highest division. The teachers' opinions have determined that they would be better adjusted in this division.

A problem not to be overlooked but not too difficult to overcome is that of avoiding the creation of intellectual haughtiness in the minds of the children in the highest divisions. This largely depends upon the teachers' understanding as well as their remarks. On the whole, however, this is not a division of extreme mentally gifted children; “Einstein's” will be most rare. (In a very large school half of the students in these divisions will have normal I.Q.'s or a little above.) These are the students with desirable study habits—children who have made good use of their native abilities.

The Middle Group

During the early grouping experiments, most of our thought was focused on the groups at the opposite poles. As time lapsed and as we studied our records, we discovered that marvelous progress was being accomplished in the middle groups. After all, these are the groups upon which the medians of the achievement scores depend. The teachers of these middle groups are unanimous in saying: that most of their

“Grouping ...

a powerful device
for easier teaching and
for better learning” —





In the Twin Lakes' system of interclass grouping, careful attention was given to **selection** of teachers and students for the upper and lower levels of the scale . . . to **introduction** of the program a grade a year . . . to the **training** of teachers in a horizontal type of in-service programs . . .

pronounced problems are removed; that their grade-level achievement ranges are reduced; that their teaching is not spread over such a wide area; and that they can much better concentrate on the group's needs.

It is not too great an administrative problem to select the teachers for the groups between the opposite poles. In a large school perhaps some extra consideration should be given to the selection of the teacher in the second lowest division. Very few pupils with subnormal I.Q.'s fall in this group. However, the problem of poor study habits is definitely a factor and the best possible parent-teacher rapport is needed.

The Incipient Program

If a grouping program is to be initiated, it is very important for the principal to have a reasonable understanding of the procedure. The program should be in written form before it is instituted. It is equally important that the teachers involved *want* the experiment; they will either make or break the program. A torpid faculty should not undertake this experiment. As the program develops it is very important for the principal to keep his teachers informed on the details and the progress of the experiment. This will be most valuable toward unifying the program as well as the clarification and blending of the teachers' thinking.

To group an entire school at one time is a Herculean task. With our many years of experience our first and second grades as yet are ungrouped; neither are we certain that they should be. This remains a problem whose solution is in the future. Since grouping

involves a tremendous number of factors, in the beginning it is perhaps well to limit the experiment to one grade level, adding another with each successive year. We have found this procedure to be successful. We have also been very successful in limiting the experiment to a single group on a grade level.

Advantages of Interclass Grouping

Grouping in our school, is not merely for the sake of classification. It is a medium by which the bright and gifted are carried faster and farther. It affords them an opportunity to follow as well as to lead; in general, it gives them a much greater challenge, because they are competing with students of more similar abilities and perhaps, for this reason, little educational snobbishness has been encountered. We find it is an arrangement that makes it simpler to broaden the curriculum for the brighter students by offering such courses as a foreign language and instrumental music; we find that we are able to carry them much farther in the academic subjects usually offered in the elementary school.

Grouping also has fewer jolts for the slow learners. It affords them the satisfaction of achievement. Competition is not geared to the degree of eternal failure. Each has a turn at leading that he would not get otherwise.

New Concepts of Teacher Training

We have found that intergrouping made it necessary for a broadening of teacher in-service training programs. In addition to the grade-level type of teacher organization, we have found a horizontal type to be of value. The

teachers of the fast learners on all grade levels are organized. It seems impossible to broaden a child's learning without an increase in his learning height. As he broadens, his grade-level growth is in proportion. Therefore, some curriculum additions and revisions are necessary. The teacher of the slower divisions are also organized, and it appears now that there is a possibility of an organization of the middle-group teachers.

Even though we group by rooms, we still find great value in grouping within each room. With the system of grouping by rooms we hope to discover many students' problems in their early stages. By placing these children with teachers best adapted to their needs we hope to cure many students' educational ills before they reach the junior high schools.

Remaining Problems

This system of accelerated learning has been accompanied by many problems, some of which are still unsolved.

The problem of what to do with the children when their academic achievements indicate they are ready for the junior high schools before the expiration of the sixth elementary year is paramount. Can the junior high schools make the necessary adjustments rapidly enough to take care of these children, or will they in reality demote them even though we have theoretically promoted them?

Shall we carry the pupils as far as we can in the junior high area or shall we organize and gear our program to the finishing of the elementary school for a high percentage of the students in five years' time instead of the conventional six years? With the present teacher organization this could be done very easily without skipping any of the grade fundamentals. In addition, we have the same problem in reverse with the slower division.

Another problem is what and how to provide materials and equipment for the divisions on the extreme ends. We believe we should have reading material for the slow learners on a high-interest level but with a word content on a lower level. Since this group has difficulty with reading, perhaps more audio-visual aids would extend the knowledge area. With the fast performers an unlimited amount of library materials, including several sets of encyclopedias, seems necessary. Adequate science equipment and many audio-visual devices would be of great value. Of course much of this material is also needed for the middle division, but grouping makes the problem seem more pronounced.

In spite of these and many other problems, we have found grouping to be a powerful device that makes for easier teaching and for better learning. ■

Misconceptions

In many cases, proponents of school district reorganization overlook the real facts of redistricting and claim erroneously that district consolidation —

- ✓ Results in reduced costs to the taxpayers involved, rather than improved educational programs in ratio to the additional dollars expended.
- ✓ Involves specified, definite principles and specific educational programs to be attained.
- ✓ Implies automatically a centralization of attendance areas on all levels in rural regions.
- ✓ Can be completely stimulated by negative devices — reduction of state aid, higher local rate of contribution for equalization purposes, etc.
- ✓ Can be promoted in an orderly fashion through a "grass roots" approach based on local, voluntary initiative.
- ✓ Means an increase in the reorganized district's size — the "all important factor . . . to be accorded initial consideration."
- ✓ Guarantees academically superior and socially better-adjusted products than those of non-consolidated districts.

The virtually universal verdict of students of government in general and of educators in particular, is that the number of school administrative units in the United States should be drastically reduced. Reorganization has been slow because there is a simple, obvious attachment to the old and traditional in education. Coupled with this attachment are social, political, and economic interests which bar progress. Wealthy school districts are reluctant to incorporate poor districts with sizable indebtedness and low taxable valuations. Also, school superintendents and board members seldom applaud action which may eliminate their jobs.

School district reorganization has been advocated on the basis of various educational and financial advantages that accrue to the participating districts. The chief reasons advanced for such action include the opportunities for the teaching staff to specialize in their major fields of preparation; to provide improved administrative and supervisory leadership; to lower the cost per pupil for the services provided; to improve transportation services; to bring pupils into contact with larger and more heterogeneous groups of their peers; to provide specialized services such as counseling and guidance, art, music, health, and school lunch programs; and to equalize financial support.

Proponents of the plan support their convictions favoring continuation of reorganization by offering studies that show that larger school districts generally have longer school terms; improved attendance; more extensive curricula; better qualified instructors, administrators, and supervisors; and more opportunities for students to participate in both curricular and extracurricular activities.

In far too many instances, however, proponents of school districts reorgan-

About School District Reorganization

ORLEY W. WILCOX

Assistant Professor of Education, Humboldt State College, Arcata, Calif.

ization programs overlook these values and stress rather drastic misconceptions (that are actually far removed from reality) in their attempts to sell the program to the uninitiated.

The following paragraphs point out some current misconceptions that may still be prevalent in the thinking of many individuals engaged in this process of consolidation.

Misconception 1. To too many people size is still the all important factor, objective, or criterion to be accorded initial consideration in any reorganization proposal.

The Fact. Size should not be the major factor in considering reorganization. A mere increase in size does not guarantee a stronger school system. Quality in education comes from many sources, including the type of organization, the effectiveness of both administrative and supervisory personnel as applied to staff leadership, the capability of the teaching staff, the physical and financial resources available to provide needed educational services, and the support provided by the community as applied to attempts to strengthen local education.

No standards as to the optimum size of a school have been established by objective means, but it is generally believed that a school which is too large or too small can impair the effectiveness of the educational program. For proper administrative and supervisory services the school district must be of sufficient size to permit financial support from local and state sources without straining the local tax-paying potential. The local unit should be large enough to provide, without excessive costs, such costs to be estimated from the results of state-wide studies of comparable school systems—an educational program for all youth through grade twelve.

While the optimum size of a school depends upon many factors, elementary schools enrolling fewer than 300 to 400 pupils are more expensive to operate and maintain than larger schools, provided that a diversified program is offered. Those schools having fewer than 100 pupils, on either the elementary or secondary level, are particularly expensive per pupil.

The establishment of larger school districts is based upon the belief that larger districts are more capable of providing the necessary scope and quality of services required in a modern program of education.

Size, in the last analysis, however, is no guarantee of improvement in educational services; it merely makes improvements possible.

Misconception 2. Educators and legislators involved in attempting to promote state-wide reorganization programs apparently feel that they have specified definite principles and specific educational programs to be attained.

The Fact. Not one of the states involved in reorganization movements has written into the school laws a clean-cut interpretation of the educational program that it hopes to achieve through this procedure.

As one studies the available state reorganization policies, it becomes apparent that such terms as *adequate educational program*, *educational opportunities*, and *educational standards* may have a tremendous appeal to the non-discriminating voter, but may also mean many things to many people involved in reorganization procedures.

The states of Illinois and Minnesota offer the explanation that reorganization is justified because of the need for "better educational opportunities, plus a more equitable, efficient, and economical

administration of the public schools, and a more equitable distribution of public school revenues."

Nebraska and South Dakota indicate that there should be a more nearly "equalized educational opportunity for pupils in the common schools, a higher degree of uniformity of school taxes among the districts, and a wiser use of public funds expended for the purpose of supporting the common school district."

The state of Iowa believes that the plan is intended to "insure equal opportunity to all children of the state and to effect a more economical operation and the attainment of higher standards in the schools."

The Wisconsin reorganization law interprets the movement as one in which the purpose is to "equalize teacher load; to equalize tax burdens for local school support; to improve the educational advantages of rural boys and girls."

New Mexico stresses the need for "providing the greatest possible economies to the common schools. To provide the proper educational facilities to all school children in the state."

The state of Washington, one of the leaders in the reorganization movement, believes that the process should provide a "more nearly equalized educational opportunity for pupils of the common schools, a higher degree of uniformity of school tax rates among the districts, and a wiser use of public funds expended for the purpose of the support of the common school system."

Michigan offers reorganization as a "guarantee of educational opportunity and to insure improvements in administration, instruction, and operation of the schools."

California, in its State Board of Education policies adopted in 1953, presents the statement that the purpose of reorganization is "to provide a better and

more nearly equalized educational opportunity for all children in the state through the creation of school districts of sufficient size to be able to offer curricular offerings and other services not possible under the existing organization."

The pattern of general objectives is apparently identical in a number of the states if the preceding statements are any indication. Certainly the desire to improve educational offerings in the schools of the states is highly commendatory. However, it would appear that the legislation passed in support of reorganization generally has failed to provide a framework of course offerings that might well be used for referral purposes and as a minimum program.

Misconception 3. Many people located in rural areas believe that school district reorganization automatically implies a centralization of attendance areas on all levels and the elimination of all outlying attendance areas and the schools which service those areas.

The Fact: It should be made clear that school district reorganization may or may not mean the elimination of attendance units. The factors to be considered include a realization that there is no reason why all children in a community school district should be transported to a centrally located building. Even in strictly urban communities, outlying attendance units within a city are serviced by both elementary and secondary schools. Such units, if properly developed, can provide needed educational services for all youth enrolled.

Broader administrative controls are far more essential than complete school plant centralization. The outlying attendance areas should become an integral part of the total school district, but not for the purpose of losing their identities.

Misconception 4. The erroneous belief that reorganization can be completely stimulated through negative devices is commonly accepted in a number of states.

The Fact: The majority of the states have attempted to promote reorganization through this approach. For example, states have reduced state aid for unsatisfactory school districts, both low-enrollment and low-evaluation; have denied the theory of sparsity correction; have demanded a higher local rate of contribution for equalization purposes; and have insisted upon budgetary reviews.

Such negative devices—even though they can be defended—assume that the failure to reorganize is due to local perversity, or a lack of educational fore-

sight, and that a denial of state aid will force reappraisal of reorganization by local taxpayers. No evidence is available that the penalties used in the past century have accomplished this purpose.

Misconception 5. The "grass roots" approach that is based on the belief that through the promotion of local initiative reorganization will take place in an orderly fashion.

The Fact: Local initiative, in the form of voluntary reorganization, is an excellent device to guarantee the right of petition and proposal. However, it lacks the compelling force that is essential to bring about widespread reorganization on all levels in all sections of a state.

The procedure of allowing the state to initiate the reorganization program need not be mandatory, with the possible exception of the low-enrollment and the low-valuation districts. The legislature could authorize several plans for consideration, and the people could then avail themselves of the opportunity of voting for the plan desired locally.

Misconception 6. Failure to realize that reorganization has been stimulated in a number of the states through a positive program of equalization.

Currently, every state has a foundation program in operation for both elementary and secondary schools. Added assistance for both capital outlay and transportation costs is a necessary adjunct if the movement is to become successful. Little progress toward reorganization may be expected in the states which fail to make major provisions for such expenditures. In a number of districts reorganization cannot take place until new school buildings are constructed. In like fashion, many districts have sensed the need for reorganization but have failed the futility of such action with its attendant cost of transportation and only a limited amount of state aid available.

Misconception 7. Many people have the distinctly erroneous idea that reorganization results in reduced costs to the taxpayers involved.

The Fact: The chief gain is not financial, but rather should come back to the taxpayers in the form of improved educational programs. Surveys indicate that few reorganization programs cost less than the systems which they supplant during the initial years of the reconversion period, due to new costs created by building needs and additional services—guidance, transportation, lunch programs, etc. Yet many people insist that one of the important advantages lies in

the reduction of total costs to the district. They justify such claims on the basis of the added revenues from the increased valuation of the larger district, yet fail to recognize the need for increased expenditures.

Misconception 8. The misunderstanding on the part of parents and other school patrons about educational values to be derived from the modern school program.

The Fact: For most people who are faced with the problem of possible reorganization, an immediate reaction is one of comparison. Schooled under conditions that closely approximate the present educational program in the smaller schools, many parents feel that the education which they received was entirely adequate and should stand the test of time in conveying a similar type to their children. A lack of understanding can be directly ascribed to a failure on the part of school officials to acquaint parents with the changes that have been effected in educational methods and special services.

Misconception 9. Failure to recognize that an increase in size of the school system through reorganization will not guarantee greater holding power.

The Fact: There is a large number of high schools in the nation that enroll less than 200 students, in grades nine through twelve. These schools are apparently providing an excellent educational program for the youth enrolled when the holding power of the schools is used as a basis for such a contention. In a 1950 study of the holding power of high schools, the researchers concluded that no clear-cut, consistent evidence was found to demonstrate the superiority in holding power of the larger schools over the smaller ones.

Misconception 10. The supposition that products of the reorganized school districts are superior academically and better adjusted socially than the products of the school districts that have resisted reorganization.

There is a definite need for a comprehensive study of the academic and social assets of reorganized districts and those districts that have failed to recognize the need for reorganization. Are the products of the reorganized school districts better prepared for college entrance? Are they better prepared for life and to meet personal and social problems that confront them?

Until such studies are made, it would appear advisable to withhold claims in support of such values that cannot be verified by objective evidence. ■

Cincinnati's Adventure Into ETV



ROBERT P. CURRY and JAMES N. JACOBS

The effectiveness of instructional television must be determined by a comprehensive system of evaluation. This third part of an important survey of ETV describes the methods and results of Cincinnati's evaluation program. The first two articles, published in your February and March JOURNAL, presented (1) principles for an effective approach to direct instructional use of the medium, and (2) how best to use television for classroom instruction —



Instructional television must be judged according to a comprehensive system of evaluation. How comprehensive this evaluation is, however, depends upon the kinds of experiments conducted; and the types of experiments in turn are a function of the administrative and instructional organization of a school system and its previous experience in the area of experimentation. The status of instruction at the time an experiment is begun also will be reflected in the experimental design and in the results. For example, the type of an experiment in teaching physics by television in a school where physics is long established and taught well to many capable pupils will be quite different from experiment in a school system where it is either physics by television or no physics at all.

Generally, the need for evaluation is to help make decisions relative to whether instructional television should be used or how it should be used. In addition, continuous evaluation serves as a gauge which gives information rela-

tive to reaching certain goals which have been set.

Several important dimensions for evaluating instructional television may be delineated as follows:

1. The effectiveness of television as a method of instruction
2. Reactions to instructional television by teachers, pupils, and the public
3. The adaptability of television instruction to various curricula
4. Financial considerations such as capital outlay, cost of operation, and depreciation.

Scope of Evaluation in Cincinnati

It is apparent from the above that a comprehensive system of evaluation is a project of considerable magnitude. It is apparent also that some aspects of evaluation require long periods of time before direct evidence can be applied to the problems.

During the past few years in which experiments in educational television have been conducted in the Cincinnati public schools, evaluation has been di-



Dr. Curry is associate superintendent of the Cincinnati, Ohio, schools and Dr. Jacobs is an assistant director of the district's division of appraisal services.

rected toward determining the effectiveness of television as a method of instruction. Although other aspects of the evaluation of educational television are important, it must be recognized that the degree of effectiveness of television in direct instruction will condition the interpretation and orientation of further evaluation. For example, if instructional television is seen to be markedly superior to conventional classroom instruction, a school system probably will be willing to tolerate higher costs, curriculum adaptation, and administrative reorganization.

In an effort to determine the effectiveness of television as a method of instruction, the Cincinnati public schools have accepted the additional costs and the various adjustments necessary to study this problem. In addition to evaluating

the effectiveness of television as a method of instruction, an attempt has been made also to evaluate pupil attitudes toward television instruction and their attitudes toward school subjects taught by television.

Results of Cincinnati's Evaluation

All of the studies of the effectiveness of instructional television conducted in Cincinnati have employed similar methods for evaluation. In each experiment, the results have been evaluated through the use of either standardized achievement tests or locally constructed objective achievement tests. In each experiment the achievement of the experimental television class has been compared statistically with the achievement of comparable classes who were simultaneously receiving conventional class-

room instruction in that particular course. In all of the experiments conducted, the data were subjected to rigorous statistical tests to determine whether any observed differences in the performance of the two groups were a matter of chance variation or a reflection of significant differences in performance due to methods of instruction.

Since 1956, the results of experiments in four subjects in the Cincinnati public schools have been evaluated to determine the effectiveness of instructional television. These subjects, along with pertinent information concerning experimental design, are shown in Table 1.

It will be noted from Table 1 that in each experiment except sixth-grade science, the group receiving television instruction also was given additional instruction by the classroom teacher. It

TABLE 1. Courses Taught by Television and Evaluated by the Cincinnati Public Schools Along With Pertinent Information About the Design and Results of the Experiments, 1958-59

<i>Courses Taught by Television and Grade Level</i>	<i>Approx. Class Size</i>	<i>Length of time Taught and Year</i>	<i>Frequency of Telecasts</i>	<i>Results</i>
Chemistry 12th Grade	35	7 Weeks 1955-56	Televised lesson every other day for 40 minutes followed by 10 minutes of discussion by classroom teacher on alternate days.	Television method significantly more effective as a method of instruction than conventional classroom instruction.
Science 6th Grade	35	8 Weeks 1956-57	Televised lesson every other day for 30 minutes with no further classroom instruction.	Television method more effective with above average ability groups; no significant difference in the two methods for average ability groups; conventional instruction more effective with below average ability groups.
Biology 9th Grade	35	One School Year 1957-58	Televised lesson every other day for a full (50 minute) period. Laboratory and discussion by classroom teacher on alternate days.	Television method more effective with above average ability groups; no significant difference in the two methods for average ability groups; conventional instruction more effective with below average ability groups.
Driver Education 10th Grade	150-200	Three Experiments, each one semester 1956-57 1957-58	Televised lesson every class period for 30 minutes followed by 20 minutes of classroom discussion. Classes meet every day (½ unit course.)	Exp. 1 — Television method more effective in general. Exp. 2 — Television method more effective with above average ability groups; conventional instruction more effective with below average ability groups. Exp. 3 — Television method more effective with above average ability groups; no significant difference in the two methods with below average ability groups.

In such subjects as driver education, ETV was generally more effective with larger classes than the conventional classroom methods —



is apparent, therefore, that the results shown in Table 1 do not reflect wholly the effectiveness of television alone, but rather reflect differences between conventional classroom instruction and the co-ordinated efforts of television and classroom instruction. In the biology and chemistry experiments, the television classes received regular classroom instruction on the days following each telecast. In the driver education experiment, a certain portion of time following each telecast was devoted to conventional classroom instruction. The function of the conventional classroom instruction period following the telecast was to clarify, discuss, elaborate, and/or perform laboratory experiments pertinent to the course, thereby complementing and supplementing each televised lesson.

It is seen in the driver education course that experimentation has been attempted only with large classes of pupils. It is believed at present in the Cincinnati public schools that insufficient evidence at the public school level has been accumulated to warrant the over-all use of large class instructional television, particularly in the academic tool subjects.

The chemistry experiment carried out in 1955-56 and the experiment in driver education did not attempt to evaluate the differential effectiveness of television with varying levels of pupil ability. Testing all groups combined, the results tended to show the television method of instruction was significantly more effective than the conventional classroom method.

In the evaluation of the remaining experiments, however, certain questions were raised relative to the effectiveness of instructional television at varying levels of pupil ability. The question asked is whether or not instructional television is uniformly a more effective method of instruction for pupils of above average, average, and below aver-

age ability. Using achievement tests as measures of effectiveness, the results of the sixth-grade science, driver education, and biology experiments have shown generally that instructional television is more effective as a method of direct instruction than conventional classroom instruction for groups of above average ability. For groups of average ability, the two methods seem to be about equally effective. For groups of below average ability, conventional classroom instruction appears to be more effective than television as a method of instruction.

Evaluation of Pupil Attitudes Toward Instructional Television

Pupil attitudes toward instructional television were measured by a questionnaire administered to one large class in each of two schools that received driver education instruction by television. The pupils in one of these schools may be considered above average in ability and the other generally is below average in ability. The pupils of above average ability expressed a preference for instruction by television, whereas pupils of below average ability preferred instruction by the classroom teacher.

The attitudes toward instructional television in the biology classes were measured by a test, entitled *Sizing Up Your School Subjects*. A comparison of the responses made by television and nontelevision groups to each of the ten questions included in the test tended to indicate that pupils preferred regular classroom instruction rather than television instruction.

Discussion of Evaluation Results

These findings are generally favorable to instruction by television. In addition to instructional television being the more effective method of instruction for the above-average-ability pupils, it is seen also that these same pupils tend to prefer television instruction. On the

other hand, not only do the below-average ability pupils score higher in achievement with conventional classroom methods, but they also indicate a preference for conventional classroom instruction. The logical meeting of these two avenues of approach are ample support of the generalization that any method of instruction must be adjusted to individual differences in pupil ability.

The most significant question arising from these investigations is whether the television method of instruction is intrinsically more effective with the above-average pupils or whether these differences are a reflection of other factors. On the basis of other research in the area of audio-visual education, it does not seem likely that the peculiar qualities of instructional television should favor the above average pupil proportionately more than the below average pupil. Rather, it is believed that this phenomenon is a result of an accelerated and more comprehensive presentation of course material which is simply assimilated more easily by the more able pupils. If this interpretation is correct, it appears that if television instruction were designed for the below-average pupil, it is they who would benefit more highly from television instruction.

Many of the unfavorable attitudes toward television which have been reported are probably a function of many factors which can be adjusted. One such factor, for example, is the length of the telecast. In the biology experiment, the 50-minute televised lesson appeared to be too long a period of time for constant attention. A somewhat shorter period of 30 minutes probably will result in better attitudes toward television.

Finally, one important aspect regarding the success of the television experiment is not revealed by the data. It is significant to report that all of the teachers who participated in the experiment expressed a desire to continue in the following year's experiment. ■

PUBLIC OPINION POLLS

and

DONALD W. ROBINSON

Carlmont High School, Belmont, Calif.

Harry J. Fuller, outspoken critic of progressive education and one of the founders of the Council for Basic Education, reported some years ago the results of an informal poll he had conducted between 1940 and 1950 by questioning his "traveling companions" on their opinions regarding the competencies of high school graduates today compared with those of 25 years earlier. His respondents, 106 in number, replied in this fashion: 81 consider the present-day graduate inferior in arithmetic, 22 say he is about the same, and three claim he is superior; 65 believe he is inferior in English, 33 say he is the same, while eight think him superior. In world affairs the division of opinion is more even, 39 saying today's graduate is inferior, 37 the same, 30 superior. Of seven categories separately inquired about, in only one did a majority opinion concede superiority to today's graduate, the one competency being poise.

In 1955, the Stanford University Institute for Journalistic Studies conducted a poll in Fresno, Calif., in which 623 voters were queried regarding the

schools. Results: 63.2 per cent said they approved the job the schools are doing; 15.4 per cent approved in part, disapproved in part; 13.8 per cent said they disapproved; and 7.6 per cent had no opinion. When asked about the specific achievement in arithmetic of children today compared with former days they spoke up as follows: 28.2 per cent said children were doing better now; 27 per cent said children were doing about the same; 22.2 per cent said children were poorer in arithmetic now; and 22.6 per cent had no opinion. The responses with respect to reading, spelling, and penmanship were not markedly different, though slightly less favorable to today's student.

When a nationwide poll in 1943 asked "Are you satisfied with what your children are getting from their education in school?" Eighty-five per cent of the parents of children then in school said "Yes"; 15 per cent said "No."

A similar poll three years later asked, "Do you think teachers in the school where your child goes do their job well

In controversies over school issues, both critics and supporters of our educational programs will quote results of polls, as gauges of public opinion, that substantiate their views. . . . What do these polls really indicate and, more important, how should they influence you in policy making for, and administration of, your local school districts? This analysis of the increasingly heated conflicts over school issues — “frills,” teacher training, federal aid, etc. — considers the real meaning of these arguments in relation to the well-being of your school districts —

EDUCATION

or poorly?” The replies: Well, 60 per cent; Fair, 29 per cent; Poorly, 8 per cent; No opinion, 3 per cent.

When Elmo Roper polled the nation for *Life* magazine in 1950 he found that 67 per cent of the people believe “children today are being taught more worthwhile and useful things than children were 20 years ago (13 per cent said not as worthwhile things, 12.1 per cent said about the same, and 7.9 per cent offered no opinion). In the same poll 67 per cent opined that we are getting better trained and more capable teachers.

Another item in this poll is most revealing. The question was, “Taking everything into consideration, would you say you are very satisfied, only fairly well satisfied, or not very satisfied with the public school system in your community.” The response was: Very satisfied, 33.4 per cent, Only fairly satisfied, 38.2 per cent, Not satisfied, 16.8 per cent, and Don’t know or No answer, 11.6 per cent. When this response is broken down by educational level of the respondent it produces these results:

Education	Very Satisfied	Only Fairly	Not Satisfied	Don't Know
8th grade	38.3	33.5	13.4	14.8
High school	33.2	40.1	16.1	10.6
College	27.1	42.5	24.2	6.2

The decrease in the amount of satisfaction with increasing levels of education is apparent. Does this mean that educated people are trained to be more critical in general, or that being better educated they are in a better position to recognize the lacks in today’s schools?

What Do Polls Indicate?

The first purpose in quoting these polls is to remind us that opinion samples can be found to support any position one wants to take, from 90 per cent approval of today’s schools to 90 per cent disapproval.

Second, scientific polls with large samples indicate that dissatisfaction with the schools is reflected in a sizable

minority of the population. The dissident faction is too large to be ignored, not large enough to be considered a popular mandate for change.

Any premier in a parliamentary government would be delighted to receive the margin of confidence consistently accorded to the public schools by the national polls.

Third, the breakdown of the responses to the Roper Poll question cited above — and the distribution of responses according to economic class parallels the distribution by educational level — suggests strongly the possibility that today’s schools are more wholeheartedly approved by the underprivileged than by the privileged. Perhaps a bias is indicated in the use of the word underprivileged. The assumption is that an overwhelming percentage of those respondents in the lowest income bracket and in the lowest education bracket are the people who inherited less money, less social status, and generally less likelihood of successful competition in a traditional competitive academic school. Consequently they vote more heavily in favor of the contemporary school which tries to gear its curriculum and its standards of success to the capabilities of all rather than the talented few.

The Pragmatic Nature of Polls

Both sides in the general controversy over “tough” versus “easy” education use public opinion polls when the results serve their argument; both denounce the polls at other times.

This is because our schools are *public* schools, guided, in the long run, like all democratic institutions by public opinion. Both sides in the controversy know this, and, like crafty politicians, are competing for the public support. As a result the controversy has become a contest between competing public relations efforts rather than a search for the truth. In fact, the most serious objection to the use of public opinion samples is the impetus it gives to the tone of contest or referendum between competing viewpoints.

Public opinion polls can be enlightening and helpful in the formulation of public policy, but they should not be treated as referenda, to be literally followed. Their use should not imply either that majority opinion is “right” or that minority wishes should be ignored in “settling” educational problems.

Public Opinion and Education’s Problems

While there is no single problem that can be referred either to public opinion or to a council of experts for solution, however, there exist indeed a great num-

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ber of thorny problems in the way of the ideal public education. The shortage of qualified teachers in some areas, the need for additional classrooms, the nature of the course offerings for the academically less capable and the administration of this program so that it will not dilute the quality of the offerings for the talented—these are engaging the attention of experts and others who are continuously seeking better answers. On these and many other problems, there will always be healthy differences of opinion.

These differences, however, do not add up neatly and consistently to two viewpoints which can justify an occasional glib reference to "the great controversy" about the schools. The great controversy, in fact, is not basically a debate about the schools at all. It is a symposium in which a great burden of atomic anxiety is being relieved. The discussion centers around the question of how far we should let ourselves drift into a soft, permissive culture or how tough we must get with ourselves in order to compete successfully with the tough Russians. From either approach the public schools offer a convenient hook on which to hang the arguments.

Quality of Performance

Where the schools do become the crux of the discussion, the debate is not really over philosophy and policy, but is simply a disagreement over the quality of performance. To the degree that it becomes a philosophical argument over what caused the changes in performance, the critics are missing the boat completely.

They are correct that academic standards are far different from what they were 50 years ago. They are not correct when they blame progressive education for the change. The cause of the change was the extension of compulsory school attendance through high school during the past 50 years. The doctrines of pro-

gressive education were largely the attempts of the profession to meet the new challenge of keeping all of the children of all of the people in school through age 16 or 17. This is the program—compulsory education through high school—which is under fire. This is the job at which the schools have not yet succeeded—though they cannot be said to have failed.

The "Proper Area of Controversy"

The proper area for controversy, if we must have controversy, is "What shall we do to improve the quality of instruction for all of our students?" During the past decade action has been piled on action to solve this problem. Special classes under special teachers for both the exceptionally talented and the unusually slow students, college courses offered right in the high school for some talented students, admission to college without completing high school for others, experiments in teaching by television and with teaching teams are examples of continuing grappling with the problem. There is no answer except continuous concern for doing the best job we can. If we work at it hard enough and long enough, that is the answer. There is no master plan, not a Bestor Plan or a Woodring Plan or a Conant Plan, or any other that will present a solution.

There is no need for exclusive emphasis on the talented student or on the underprivileged. There is great need for accommodation if not compromise. This country possesses enough material wealth to provide far more school services, with specialized attention to the top, the middle, and the bottom of the I.Q. range—if it wants to.

At times, there must be substantial accommodation—especially in small communities, where the entire high school faculty numbers three or four teachers. The exceptionally brilliant child in this community cannot expect

to receive the same attention in terms of library or laboratory facilities or specialized advanced classes that he might have if he could attend New York's High School of Science. Nor, because of salary differentials and the impossibility of specialization is he likely to have as sophisticated a teacher.

The capable student will seldom receive the 100 per cent perfect stimulation of his every potential talent. He should, and in good schools does, receive just as close to that ideal as can be achieved within the limit of time, money, and human ingenuity available, and as much or more consideration than any other group in the school.

If the talented are unwilling or unable to use their special talents to push themselves beyond the normal requirements for the class, they cannot always expect individual attention and coddling any more than the sluggard who fails to use his more limited talents. The good teacher will do all she can to help all students individually. All students—and their families—must assume a large share of responsibility for that student's willingness to take full advantage of his opportunities to learn.

The Area for Compromise

Where the critics are willing to forget the either-or approach and work for the best curricula the school can offer for all students in their communities the result will be better education for all. Where the educators are willing to admit the necessity for providing the highest possible standards of achievement for all, including the best academic offerings for the best students, they will allay much of the misgiving and distrust of the underlying philosophy of differentiation among students. Although the critics claim a basic flaw in the philosophy, they are anxious at heart that all students be served without a general deterioration of standards.

The leading advocates of both sides of the controversy readily and sincerely accept the thesis that democratic schools must serve all of the people. One side then promptly begins to emphasize the prior urgency of academic and intellectual standards at the level of challenge for the most talented, while the protagonists for the schools emphasize the need to develop social competence plus the unique individual talents of all students, and neither takes time constructively to think at length about the other's viewpoint.

Not only are both viewpoints valid, both are essential, and they are very far from being mutually exclusive. They are compatible in practice if we can eliminate the insistence on first or most and concentrate on providing the best for all. ■

ASSOCIATION NEWS

The 1959 AASA Convention

... during which administrators considered
"Education and the Creative Arts"—

Relegating such contemporary convention standards as federal aid, science and mathematics, the gifted, merit rating, etc., to a supporting status on its program, the 1959 convention of the American Association of School Administrators took a concentrated, relaxing, and occasionally inspiring look at "Education and the Creative Arts." The meeting was held February 14 to 18 at Atlantic City, N. J.

The record 19,000-plus administrators, teachers, board members, and guests who registered for the convention underwent a refresher course in culture through a program that, by major speeches, group discussions, demonstrations and showings, etc., attempted to establish the relationships between (1) the role of education in developing "America's fine arts movement" and (2) the place of the fine arts in the schools' instructional program.

These relationships were defined:

1. In *music*, by a concert of the Eastman Philharmonia, Howard Hanson, conducting. This musical commentary, titled "Painting the Sound," portrayed with selections from Bach, Wagner, Mozart, Greig, Ravel, etc., how music is (1) history and (2) a creative expression of style,

emotional expression, motion, form, and color.

Music according to Dr. Hansen, is no "frill." It is a universal language and a difficult one that requires study if the student is to enjoy it.

2. In *drama*, through an address, "The Theater in American Education" by F. Curtis Canfield, dean of the school of drama at Yale. Introducing the study of the dramatic arts into the classroom, according to Dean Canfield, involves (1) the study of the complete art—acting, decor, lighting, costuming, directing, etc.—and (2) the study of theatrical performances, especially in "upwards of 3000" art theaters in colleges and universities.

This introduction, however, warned Dr. Canfield, is difficult, for it should not be attempted except by "fully trained teachers. . . . You can begin by encouraging your people to produce only those plays which are written with style and point by noted playwrights."

3. In *architecture*, as Seattle architect John Stewart Detlie considered "The Creative Art of Architecture." Indicating how architecture compromises between function and beauty, Mr. Detlie answered the im-

portant question, "Why has not our educated Democracy learned how to create a tradition of great architecture?" by suggesting that education has failed to "create . . . the architects, the clients, the builders, and the whole fabric of society which can distinguish, demand, create, and enjoy the fruits of the arts of architecture."

4. In *television*, as CBS Television Network president, Louis G. Cowan, pleaded for a "latitudian view of the arts" in that TV (like education) must maintain a very broad concept of art because their objective or appeal is to the millions rather than to the thousands of "sophisticated art." Television has, according to Mr. Cowan, (1) exposed the millions to arts (many of which, "until the advent of TV," were simply not communicable to most of the people outside of the handful of great metropolitan cities) and (2) offers an "opportunity to evolve new art forms."

5. In *poetry*, as John Ciardi, poetry editor of the *Saturday Review*, argued that familiarity with poetry is essential for the truly educated man. To him, poems are one of the means by which we achieve contact with the great minds that make us civilized but the nature of poetry is elu-

Every seat taken, the mammoth Atlantic City auditorium reverberated with the music of Howard Hanson and the Eastman Philharmonia (right). The annual architectural exhibit (below), offered a country-wide view of school design.



— AASA



At the Sunday morning benediction, the "All-Philadelphia" senior high school choir sang.

sive. The teaching of poetry must be lightened to appeal to the students, because if education produces students with "no time for Shakespeare," we will have a "new species of mechanized savage, the Push-button Neanderthal."

In *poetry* also as Richard Eberhard, professor of English, Dartmouth College, delivered "A Reading of His Own Poetry with Commentary." He advised that students should read poetry, along with the criticism of poetry, to create a taste, a "way of enlightenment, of cultural advance."

6. In the *graphic arts*, as Carl Nater, director of Walt Disney's Educational Film Division, aided by film excerpts from some of his studio's efforts, demonstrated "Creativity in Education Through Graphic Arts." Mr. Nater stated that the Disney "type" of motion picture (both factual and fiction) was written and produced to reveal a story in an entertaining fashion—to explain and entertain—as the key to instruction through graphic arts.

Addresses Tangent to the Theme

And in three major addresses, that were variations on the specific convention theme, the subject of education and the arts was dilated to consider education's scope in "Humanity's Greatest Adventure" (Reuben G. Gustavson, president and executive director, Resources for the Future, Washington), "Science as a Creative Art" (Dr. L. A. DuBridge, president, California Institute of Technology, Pasadena, Calif.), and "Creative Action" (Dr. George Z. F. Bereday, associate professor of comparative education, Teachers College, Columbia University).

1. Describing the living standards' advance in countries he recently visited (Mexico, Sweden, Russia, etc.), Dr. Gustavson linked education and science as a keynote to our high standard of living. "... Education and science have created a culture (in America) in which not all of the people have to engage in the elemental tasks of producing food and shelter for the people; that by using the energies that have become available, a smaller number may produce what everyone needs. ... And that is what I want to hammer home, that it is this energy which is made available through scientific discovery coupled

with the ability of man to make use of it, that gives us our standard of living."

The final matter, according to Dr. Gustavson, is to relate these energies and resources to the "problem of building and maintaining a society of free men"—accomplished when education guides from within "exposure to the world's highest wisdom transmitted to us by history, literature, music, and art. ... It is the "duty of our educational units to turn out men capable of taking places of leaders in and developing the kind of leadership that would increasingly produce a society of free men. ..."

2. Dr. DuBridge, as if to justify his presence on the esthetic program, stated that "science is one of the creative arts. It is one of the most magnificent, most beautiful, and most inspiring of the arts." For the scientist looks at the world and at the people in it, like the artist, writer, and sculptor, and then "through a creative act of his own mind, his own spirit, his own imagination has brought into being a new concept, a new insight, a new expression, a new embodiment of what he saw—indeed, in what he has seen and observed all his life."

Tying this in with the subject of education, Dr. DuBridge pleaded that the high school student be given a "sympathetic ... understanding introduction to science," admitting that the scientists themselves have been woefully amiss in recognizing the problem and in putting forth the effort to bring the "creative concept of science to the high school level." Science must be first viewed as a "magnificent attempt on the part of human beings to understand the universe in which they live rather than as a collection of tools and rules, of instruments and equations."

3. The progress of American society and American education was praised as "remarkable" by Dr. Bereday, yet he warned school directors that "We must guard our educational system and our society from falling victim to the processes to which all the previous opulent societies have succumbed: the growth of inertia and the proposition that it is purely what *one knows* rather than what *one knows and does* that is important in education."

And the key to this successful operation: flexibility. "Also its capacity to expose

young children to a very great variety of experiences so that they may discover and perfect whatever they can do best. ... It is the discovery and pursuit of what each individual does best that leads to a vigorously expanded creativity in the culture."

The Group Sessions

And this preoccupation with "culture" infiltrated into the multitude of sectional meetings, research study reports, case studies, debates, etc.—usually reserved for "heavy work sessions"—where over 25 per cent of the discussions were concerned with aspects of instructing the fine arts: "Creative Arts in Adult Education," "Use of the Dane in Teaching Exceptional Children," "A Well-Organized Program of Dramatics in the Elementary and Secondary Grades," etc.

Of the remainder of the group session—some 75—several treated topics that are of special interest to school board members: *Why Superintendents Get Fired* (because, according to Dr. Earle W. Wiltse, superintendent of schools in Grand Island, Neb., of a lack of direction, of the ability to evaluate important problems, of being able to see the other person's viewpoint, etc.); *Should Fiscally Dependent School Boards Be Held Responsible for the Educational Program?* (with two superintendents presenting the two sides to this important question); and *The Rightful Roles of Boards of Education, PTA's, and Citizen Councils* (all were to be tolerated, provided they kept their place).

The Added Attractions

Finally, what about the diverse sidelights of this "Greatest Education Show on Earth":

1. The AASA's 37th Yearbook, "Educational Administration in a Changing Community," received perusal, comment, and acceptance by administrators. Its subject area considers how the superintendent—whose work is geared to a complex rapidly changing unit, the community—can gauge the community, "read" its signals, and then play it as if he were on a football team.

2. The architectural exhibit, introduced just nine years ago, and now grown into one of the major attractions of the convention, featured more than 250 new school buildings of 185-plus architectural firms. By way of evaluation of the vast diversity of design and construction of the display, the exhibit jury summarized that "School buildings are getting better. The architecture is improving. More attention is being given to the instructional program and to the basic needs and interest of children and teachers. New building material, as well as older familiar materials, are being used more effectively."

3. Bannered as "the world's largest showing of educational materials and supplies," the 466 exhibits, according to Mr. R. C. Chapman, of Mutschler Brothers Company, Nappanee, Ind., and president of the NEA Associated Exhibitors, brought to the convention almost every conceivable physical contribution to teaching and learning. ... As usual, the aisles were jammed, the souvenir bags were loaded, and the exhibitors were delighted. This glee was

(Concluded on page 60)

Co-operative insurance funds
can save you money —

Use Your Insurance Dollars Wisely!

GAYLORD D. MORRISON

Professor of Education, Colorado State College, Greeley

With a continued increase in the cost of operating schools, board members and school administrators have been giving added attention to areas of true educational economy. Their purpose is to save money without jeopardizing the learning activities of the pupils.

Such was the aim of the Colorado Education Association this past year when they voted, in their general assembly, to study the insurance experiences of Colorado schools. These experiences were to be compared with practices in states that are now maintaining their own co-operative insurance plans.

An information request form was sent to 870 Colorado school districts. This number made up the list of districts that were thought to be maintaining insurable property. Information was sought concerning the amount of premiums paid for: (1) building insurance, (2) insurance on buses, and (3) boiler insurance. The districts were also asked to report the amount of money received for losses covered by these three types of insurance during the past five years. Usable returns were received from 420 districts.

The totals of the premiums reported by the participating districts and the amounts received for losses are tabulated in Table I. The building insurance, which included fire and extended coverage, amounted to \$385,275.42 in annual premiums for the schools reporting. These schools received an average, over the past five years, for losses on buildings an annual amount of \$68,431.87. This amounted to 17.9 per cent of the premiums.

The bus insurance, which includes such items as collision, liability, and glass breakage showed a total annual premium of \$82,196.82 spent by the districts reporting. There were 217 districts that reported hav-

ing insurance on buses or other vehicles. These districts received an average annual amount of \$10,129.74 for losses covered by bus insurance, which amounted to 12.09 per cent of the premiums.

TABLE I. Insurance Experience of 420 Colorado School Districts

	<i>Fire and Extended Coverage</i>	<i>Bus Insurance</i>	<i>Boiler Insurance</i>
Total of Annual Premiums	\$385,275.42	\$82,196.82	\$28,617.56
Average Annual Losses	\$ 68,431.87	\$ 10,129.74	\$ 1,863.85
Loss-Cost Percentage	17.76	12.09	6.52

TABLE II. Loss-Cost Ratio of Educational Institutions

	<i>Colorado</i>	<i>United States</i>
Brick buildings in protected areas	38.0	36.5
Brick buildings in unprotected areas	70.2	64.0
Fire resistive buildings in protected areas	30.1	13.4
Fire resistive buildings in unprotected areas	7.3	6.7
All types of buildings in all areas	39.6	37.2

(The above ratio for Colorado is for the period 1951-55, and for the United States it is for the period 1952-56.)

Solving the Special School Plant Problem —

Many of the smaller schools did not maintain a heating plant that was equipped with a boiler. It was observed that several large school systems which would logically maintain boilers did not report any boiler insurance. The total premiums paid per year by these districts amounted to \$28,-617.36 and the average annual collection for losses was \$1,863.85. This loss amounted to 6.52 per cent of the premiums. Six districts reported losses on boilers during the five year period.

Insurance Costs for All Educational Institutions

In insurance language the relationship of losses to the premium is called the "loss-cost ratio." From the records of the state Insurance Bureau in Denver, it was found that there is no classification of insurance risk which reports public schools only. All educational institutions are grouped together. This record further showed the loss-cost ratio of various building construction and protection areas as indicated in Table II.

The state Insurance Bureau report further stated that, during the five-year period 1951-55, \$1,745,034 was spent by Colorado educational institutions for insurance premiums on buildings.

The above research gives a number of implications. One indication is that public school property is probably a better risk than property owned by other types of educational institutions. It would appear that commercial rates are especially high on fire resistive buildings in relation to their losses. The outstanding conclusion that could be made from the data is that in the words of Ben Franklin the school districts are "paying too much for their whistle" when it comes to insurance.

Features of the Co-operative Insurance Fund

What is the answer? The schools of five states and a number of large cities have been solving this problem through state wide co-operative insurance funds and in the case of some of the large cities by setting up their own sinking fund to replace losses. As one example, to show that this is not a new idea but a rather proved practice, South Carolina has had a sinking fund which has insured state, county, and public school property since 1900. They have been insuring public property at a rate varying from 65 to 80 per cent of the commercial rate and at the same time have built up a several million dollar reserve.

North Dakota has been insuring public property, including school buildings, since 1919. The rates have varied from 50 per cent of the commercial rates down to free insurance or no premiums, for a period prior to 1948. In spite of these low rates they have built up a reserve amounting to over three million dollars. It should be noted that not all of the state plans have the most desirable insurance programs. The commissioner of insurance in North Dakota

is concerned that their state laws do not permit reinsurance of the large risks. Reinsurance of large risks is practiced by most state funds as well as by commercial companies.

The experience of the past year of the Wisconsin insurance fund indicates that Wisconsin school districts are charged 50 per cent of the regular commercial rate. Losses during the past year were 20 per cent of the income or 10 per cent of the commercial rate. The cost of administering the fund was 8 per cent of the income or 4 per cent of what the commercial rate would have been. It is true that one year is not sufficient time to establish insurance experience; however, it may be seen from this that the losses could go much higher without depleting the reserve.

Other states operating insurance funds which insure school property are Alabama and North Carolina. The states of Florida, Kentucky, Michigan, and Oregon have funds for insuring certain public property but do not include schools. Some of the larger cities have set up self-insurance plans. Examples are New York, Chicago, Cleveland, St. Louis, Seattle, and Lansing.

The Self-Insurance Idea

A principle under which commercial companies operate is that their risks are scattered and they have sufficient reserve to withstand the highest probable loss that might occur in a given time. If the public schools of a given state pool their resources they would represent far greater wealth than the typical insurance company and the risks would be well scattered. A state insurance fund can operate on a very low administration cost as they have no agents to pay, no plush offices to maintain, very little advertising and no profits to share except with the schools and agencies involved.

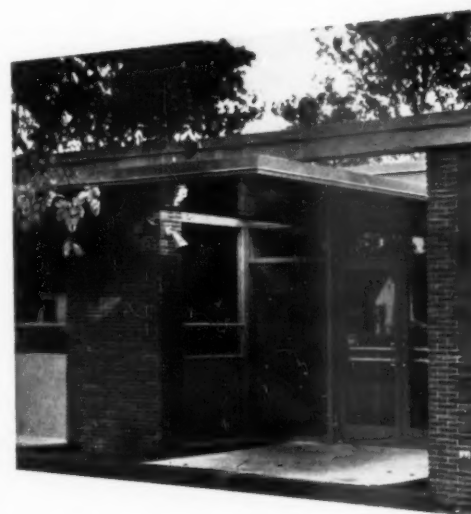
It has been observed that a state co-operative insurance fund has been favored by many educators and school board members. Even certain commercial insurance representatives, who have spoken their honest convictions, have agreed that it would be to the best interests of the schools for a state to operate their own fund. To be sure there has also been strong opposition by others who have loyalties to and investments in insurance companies. One such person has voiced his feelings toward state insurance funds by branding them "socialistic." Such a plan probably is just as socialistic as public schools, fire departments, and state highways. These, and many other agencies, have long been accepted as being designed to do a job more efficiently through co-operation than for each individual to provide his own service.

Boards of education should consider the evidence of research and the experience of state insurance funds during the past half century to determine if their insurance dollars are being wisely spent. ■

Many school districts are confronted annually with the need for planning a "special" school to meet specific plant problems.

Providing for expanded instruction in many areas of the curriculum — especially in the secondary school — demands an expansion of facilities. Many buildings are completions of "future" phases of a long-range, well-planned building program. And existing "service" buildings — administrative, warehouses, etc. — may no longer be adequate to handle the increasing classroom population.

Representing recent construction of this type — construction designed to meet a special need — are the three buildings we've selected for review on the following pages: (1) a building for teaching science as one unit of an expandable campus high school; (2) a gymnasium addition to an older high school plant; (3) an administration building which centralizes managing the district's schools.



Considering expansion
of your science facilities? Here's —

A Building for Teaching Science



A botany laboratory in the Artesia, N. Mex., high school's science building

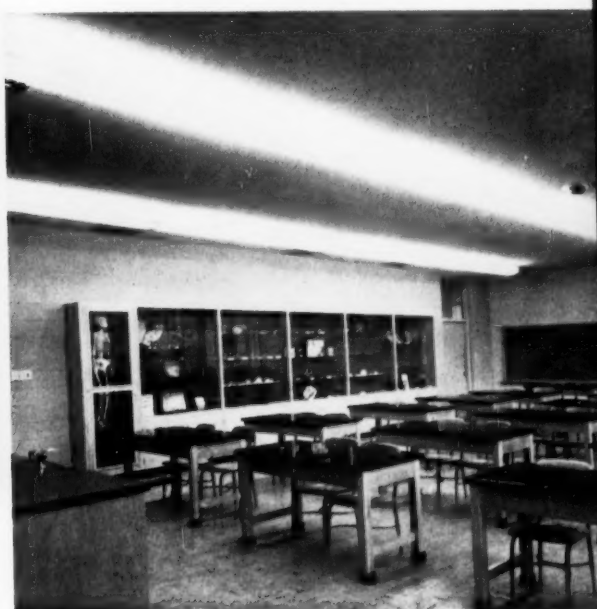
Designed as one of 14 units of a campus-type high school in Artesia, N. Mex., the science building has facilities for instruction in biology, physics, and chemistry, with areas for experimentation in botany, photography, etc. Arranged on both sides of a central corridor are two laboratories, two combination classrooms and demonstration rooms, preparation-teacher areas, etc.



Looking down from the raised student seating area, a view of the teacher's platform and table of a typical demonstration room



Above: another view of a typical demonstration room in Artesia's science building, showing the risers for the students' desks and the simple, effective teaching area. Right: the biology laboratory with the built-in demonstration cases along the corridor wall.



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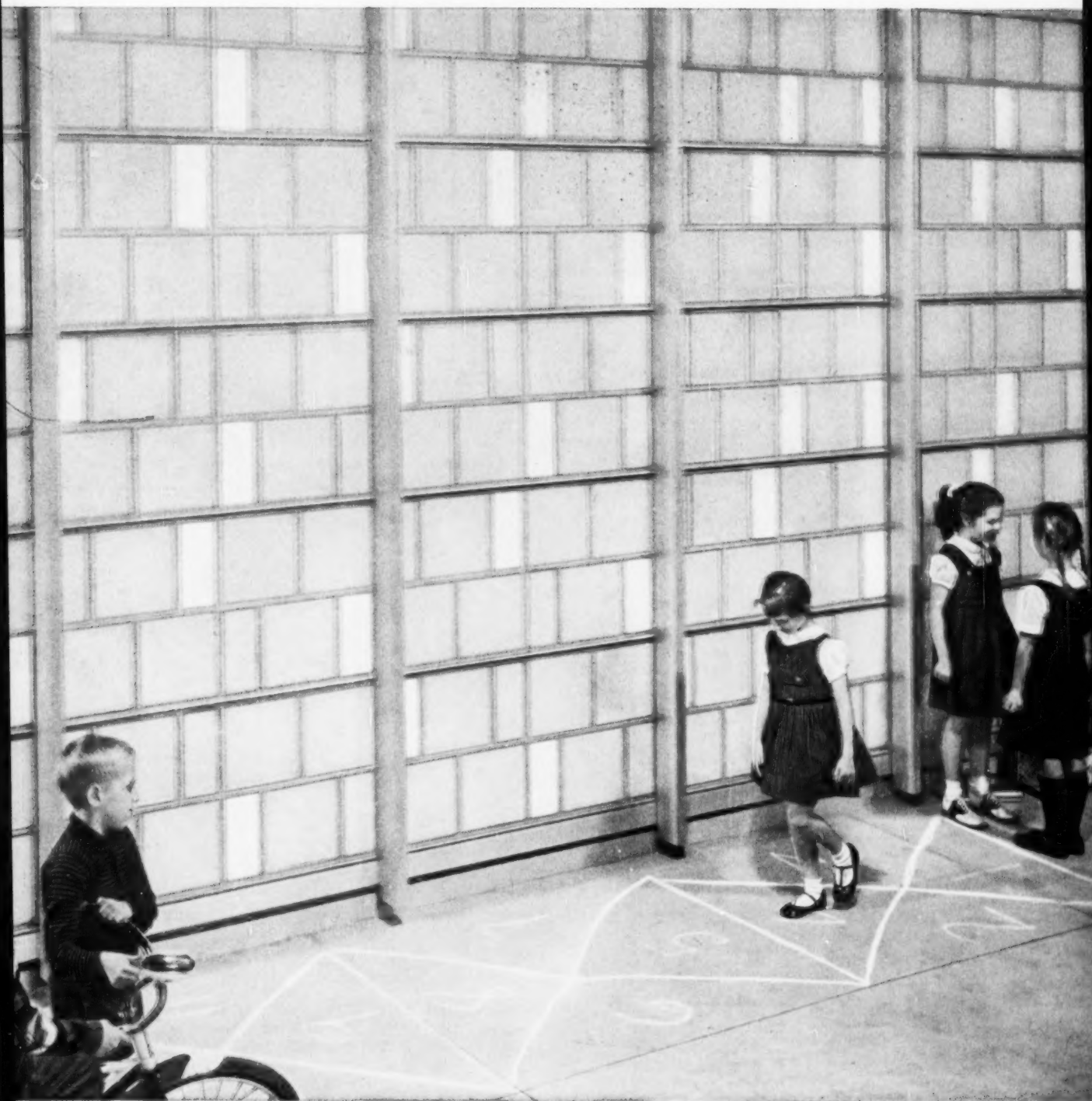
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The simple, functional exterior of the Artesia, N. Mex., high school science building — Vorhees and Standhardt, architects, Roswell, New Mexico. Dr. Vernon R. Mills is superintendent in Artesia.

Construction Materials

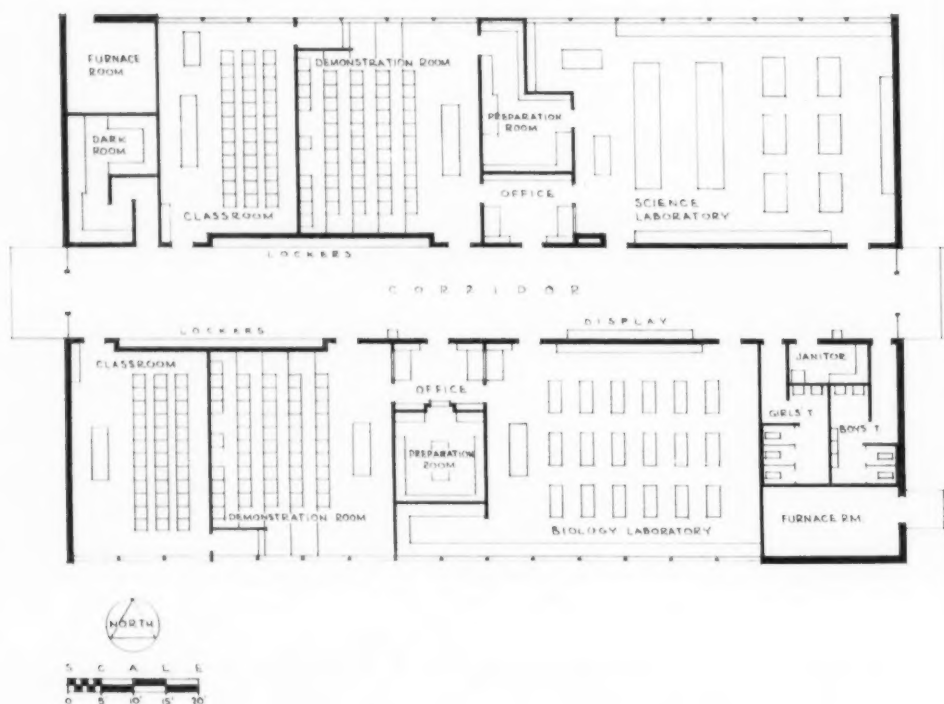
The exterior of the building is concrete block and brick; the interior wall finish of the rooms are plaster and painted block. The floors are asphalt

tile over a concrete slab and the ceilings are acoustical tile. The lighting throughout the plant is fluorescent.

For approximately 96,000 square feet, the cost was about \$150,000, excluding

site, equipment, etc.

While the building is a unit of a campus-plan high school, it could provide ideas for a way to expand an existing science facilities. ■



The Gymnasium Building

Built as an addition to the Oconomowoc, Wis., high school, the school's new gymnasium is a two-story structure with facilities for an extensive secondary physical education program.

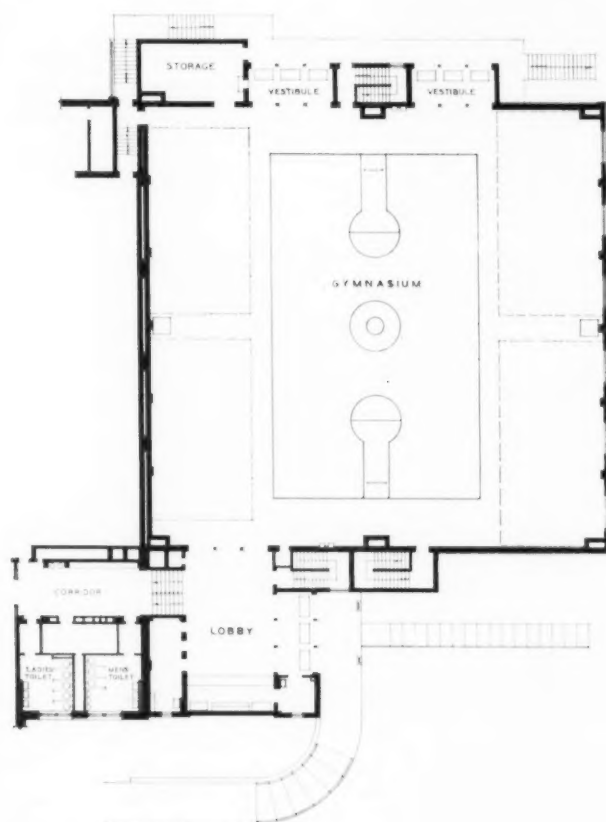
On the upper level is the gymnasium playing court with a folding partition which can divide the area into two teaching stations. Folding bleachers are located on both "long" sides of the

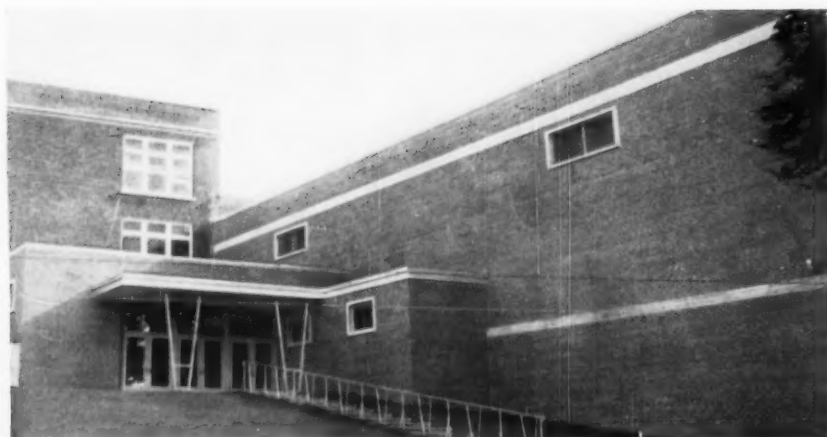
court to accommodate spectators for basketball games, gymnastic exhibitions, etc. On this level also are a lobby with a refreshment stand, lavatories, and ample storage space.

Team, boys', and girls' lockers occupy much of the lower level of the gymnasium building. There are also showers, toilets, offices for the directors of physical training, drying areas, a

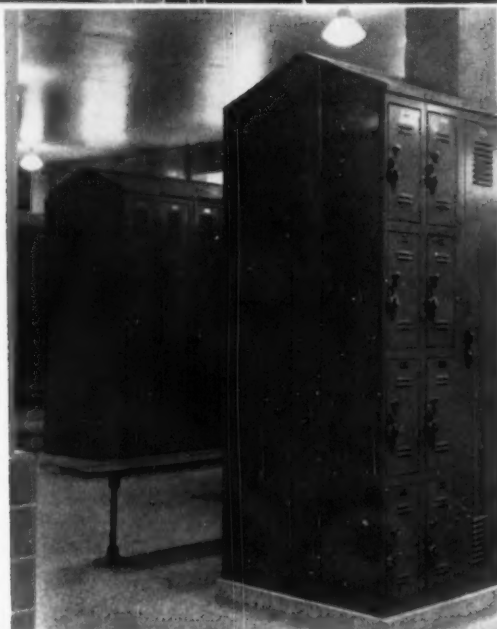
laundry, and storage areas.

Designed to blend with the brick exterior design of the older Oconomowoc high school building, the gymnasium has met the needs for expanded physical education facilities that ideally should be located close to the main high school plant. The cost of the building, including equipment, was approximately \$500,000. ■





A view of the brick exterior of the gymnasium addition to the Oconomowoc, Wis., High School (the older high school plant proper is shown at the left). Architect of the gymnasium building was the firm of Ebling, Plunkett, and Keymar, Milwaukee. Superintendent at Oconomowoc is Robert D. Gilberts.



A view of the boys' locker room on the lower level of the gymnasium building, showing the terrazzo floor, the glazed tile walls, and the compact locker plan. Peaked locker tops reduce cleaning problems.



A view of the main playing area of the court of the gymnasium addition of the Oconomowoc High School. A folding partition (shown folded back at the right) can divide the court into two physical education instructional areas; folding bleachers on both sides of the court accommodate spectators at basketball games, gymnastic exhibitions, etc.

the special
school plant



Compact and efficient —

An Administration Center

LEE M. ELDER

Business Manager, Denison, Tex., Schools

The administrative staff of the Denison, Tex., schools occupied five classrooms in the district's junior high school before moving into its new, centrally located administration center. In addition to improving business operations in the district through centralization of staff effort and improved working conditions, the classrooms, turned over for instructional purposes when the new center was finished, would have cost up to \$10,000 more if added to the existing school.

The administration building, which cost approximately \$66,000 with site and equipment for 40,000 square feet,

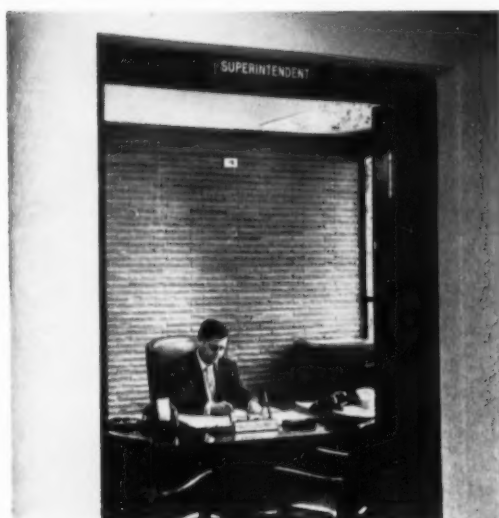
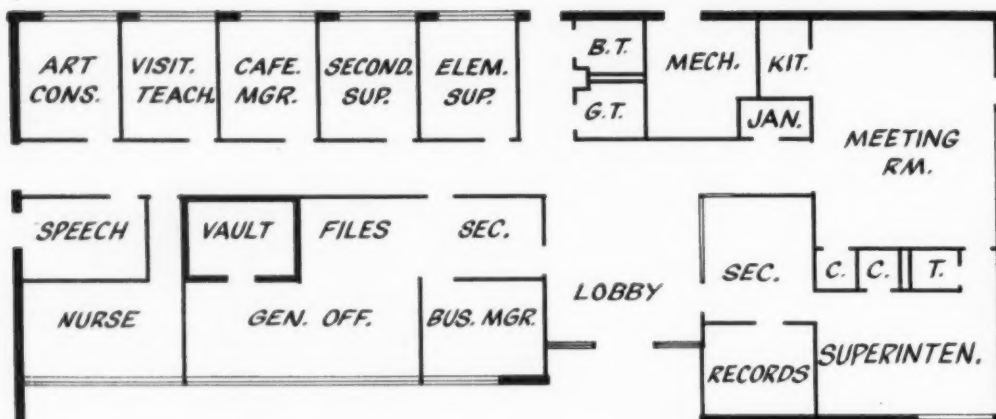
contains offices for the superintendent, business manager, secondary supervisor, elementary supervisor, cafeteria supervisor, art supervisor, art teacher, school nurse, and the school board conference room. There are also facilities for the superintendent's secretary, a general office with files and vault, space for the school records, as well as ample storage and mechanical space.

New Equipment

New equipment in the building includes an automatic bookkeeping machine which provides a complete budgetary control system. Along with keeping

the double entry ledger accounting system, the machine keeps records of the district's athletic fund, the cafeteria fund, and all the general activity funds of the various schools in the district. This centralization of bookkeeping relieves the building principals of this time-consuming task. The payroll journal, the teachers' ledger cards, and the checks are also made out simultaneously by the machine.

Denison's administration center has an exterior finish of brick and the interior is finished with exposed brick, walnut paneling, and plaster. The building is completely air-conditioned. ■



A view of the general office (below) of the compact administration building serving the Denison, Tex., Schools. Wilson, Patterson, and Associates, architects and engineers of Fort Worth, Tex., designed the building. Superintendent of schools in Denison, H. W. Goodion, is shown at the left, in his private office, one of seven in the building.



Liberal Court Interpretation of School Statutes

STEPHEN F. ROACH

J. J. Ferris High School, Jersey City, N. J.

An opinion handed down a few years ago in the Texas Court of Civil Appeals¹ contained the following interesting comment: "[Our] public school system would be . . . seriously demoralized and hampered, if courts should attempt to strictly construe all the vague, confusing, conflicting, and constantly changing statutes upon that subject."

"A substantial compliance with the objects of each act, when and if ascertainable, is all that may be hoped for; and this may be accomplished only by a liberal construction of those acts to that end."

Similar comments have been expressed in countless court opinions before and since this one in 1953. But few have expressed the thought so concisely.

These time-honored and oft-repeated expressions of the views of our American courts have thus, in effect, established a highly significant legal principle: school statutes are to be construed liberally; and substantial compliance with such statutes will ordinarily be acceptable.

The basis for this principle has usually involved the reasons mentioned in the above cited opinion. Frequently mentioned are two other reasons: (1) Laws for the conduct and government of the public schools should be construed so as to produce the beneficial purposes intended by them, provided the rights of citizens are not violated (this may best be done by giving school statutes liberal [rather than strict] interpretations); and (2) Since the administration of school matters generally, and many school statutes particularly, rests in the hands of well-meaning laymen, not learned in the law, substantial (rather than technical) compliance should be sufficient.

On occasion this principle has been restated as a specific legislative enactment. Thus, the Oklahoma statutes have provided: "If any section or part of the Okla-

homa School Code is found to be ambiguous or otherwise subject to more than one interpretation, such section shall be liberally construed to the extent that the general purpose of the entire code and of public education may be advanced."

Application of Principle

The exact application of this legal principle by the State courts varies, of course, with the specific circumstances involved. Thus, on occasion, it may take the form of a judicial holding that a statutory provision of the School Code is to be considered only *directory* rather than *mandatory*; or that a statutory enumeration of requirements for some phase of district operations is only a *minimal* condition; or that it *will generally be presumed* that acts of school boards are performed rightfully and in good faith.

And while it must be recognized that not every court, in every instance, will automatically apply this principle, any study of recent American judicial decisions would show that the vast majority of our courts do accept and apply it.

A more detailed examination of some recent judicial holdings relating to this principle of "*liberal construction and substantial compliance*" should be of value.

Two areas of school district operations where the courts have spoken in this regard relate to: (1) the acceptable wording of proposals to appear on the ballots for bond issue elections; and (2) the procedures to be followed in undertaking changes in school district boundaries.

Bond Issue Elections

The first of these aspects has recently been considered in Minnesota, Ohio, and Georgia.

In the Minnesota case² the wording of the proposal, as submitted to the voters, read: "Shall the Joint Independent Con-

solidated School District No. 11 . . . borrow money by issuing . . . bonds in an amount not to exceed \$450,000 for the purpose of the acquisition and betterment of schoolhouses of the district?"

Suit was brought against the district on the ground that the ballot question was a prohibited "double proposition," since it provided for both *acquisition* and *remodeling* of school facilities. It was contended that the question, as here worded, was in conflict with the Minnesota Constitutional provision that: "Each proposition or question submitted [to the voters] shall be stated separately . . . on the ballots." Similar specific Constitutional or statutory provisions are in effect in many states.

In rejecting this contention the court pointed out that to fall under the Constitutional proscription a ballot question would have to embrace two or more "*dissimilar* and *discordant* subjects which cannot reasonably be said to have any legitimate connection." On the contrary, it held, the proposed question here at issue involved two subjects so *naturally related* that they formed but "one rounded whole or single plan."

In justifying this construction of the pertinent school law the opinion went on: "In these days . . . it frequently becomes necessary to build new schoolhouses and rehabilitate or remodel existing facilities so as to conform to a new use for a larger enrollment, all as part of a united and integrated plan which will enable the school district to handle the new school population. As long as the ballot includes one related and integrated plan, it states only one proposition or question, even though it might include acquisition of new units and betterment or remodeling of old units."

In the Ohio case³ the school board resolution cited the necessity for a bond issue "for acquisition of realty, construction of fireproof school buildings and providing of furnishings therefor."

This resolution was opposed as being contrary to the statutory "one purpose" provision relating to such ballot propositions.

Here, again, the court upheld the propriety of the board action. And again, the court based its decision on the finding that there existed "a natural relationship" between the various objects in the proposition so that, in fact they formed "but one rounded whole."

In the Georgia case⁴—relating to the Bacon County schools—suit was brought because the pertinent election notice had stated that the bonds were to provide funds "to build, construct and equip new educational facilities . . . [for the] adding to, improving and equipping existing facilities . . . and [for] acquiring the necessary property therefor and paying expenses incident thereto."

Similarly, as was done in the two previous cases, the Georgia court upheld the action of the school authorities. Again the

¹Magnolia Springs Common S.D. No. 10 et al. v. Kirbyville Indep. S.D. No. 905 et al. In Court of Civil Appeals (1953). Cited as 255 SW2d 326 in the West National Reporter System.

²Buhl et al. v. Joint Indep. Consolidated S.D. No. 11 of Big Stone and Traverse Counties. In Minn. Supreme Court (1957). Cited as 82 NW2d 836 in the West National Reporter System.

³State ex rel. Bd. of Educ. of Miami Trace Local S.D. v. Thompson et al. In Ohio Supreme Court (1957). Cited as 145 N.E.2d 668 in the West National Reporter System.

⁴Miles et al. v. State of Georgia et al. In Georgia Court of Appeals (1957). Cited as 101 S.E.2d 173 in the West National Reporter System.

(Concluded on page 62)

Hints on planning —

Modern Lunch Facilities

LEOPOLD BUZZINI

Food Service Equipment Consultant
Eggers and Higgins, Architects



Today, the ordinary problems involved in school lunchroom planning are compounded by an often myopic concern with construction costs. The importance of good maintenance is apt to be overlooked in the planning stage of modern school plants. Almost in self-defense, the school lunchroom planner must find ways of reducing operating costs within the framework of sound planning principles and high maintenance standards.

The lunchroom of a new school in Westbury, Long Island, demonstrates several methods that can be utilized to achieve this goal.

The school's requirements more or less typify the problems American school districts are facing in an era of swelling enrollments. Located in a populous suburban community, the school, Westbury High School, opened this past September with split sessions.

Background Requirements

The basic physical problem was to feed 800 students in two different lunch periods. The plan developed called for two cafeteria

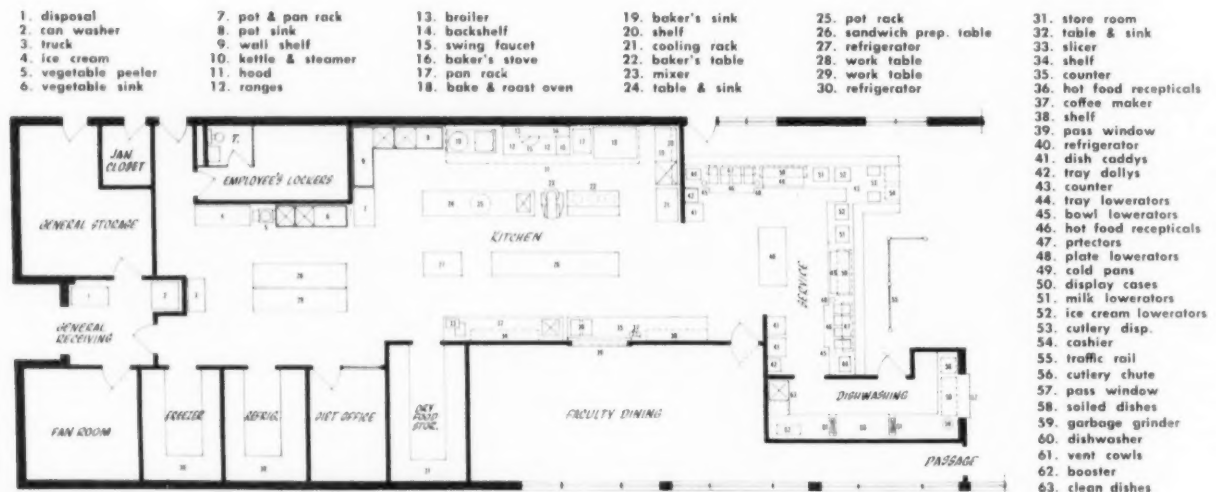
lines large enough to serve 400 students per period. Doors to the two serving counters were placed at opposite ends to avoid crisscrossing traffic. The dishwashing area was located adjacent to the serving area between the student and faculty dining rooms and away from the serving lines to eliminate cross traffic. Dishes travel only a short distance to the serving area on dish storage trucks which precludes double handling.

Except for hot foods, the service area at Westbury is organized on self-service lines. The plan calls for students to bus their own dishes and to send the cutlery down a cutlery chute and the trays and dishes through a pass window, after which they are directed to the dishwasher and sterilizer.

Through the use of folding doors that seal off the serving line, the multi-purpose table area of the cafeteria can be used by students for study before and after classes.

The school's desire to use the lunch area for PTA, student council, and special meetings and functions meant a maximum employment of space. This dictated the use of a large single dining area rather than smaller units, and the addition of a small snack bar area which includes a milk-shake machine, grill, and griddle. This area can be closed off with folding doors when it is not used.

The important need for creating a relaxed, visually appealing setting for the lunch periods was met economically through the tasteful use of color and decorative lighting fixtures. The ceiling was treated with a fiber acoustical tile and the walls with a combination of natural finished wood paneling and cement-enamel coating finished in aqua, yellow, and black "spatter" on a white background. The floor was finished with a light gray vinyl asbestos tile and the recessed fluorescent lights were



augmented with ornamental brass chandeliers.

Devices for Lower Costs

Among the various methods utilized to effect lower lunchroom costs in construction, operation, and maintenance, the following might be considered by school boards, architects, and school lunch directors of local school districts when planning their new high schools:

1. One crucial area where dollar savings can be achieved in food preparation is the receiving to clean-up cycle. There are hopeful signs, for example, of a trend to large frozen food areas for vegetables, meats, etc., which can be geared more closely to the one-meal-a-day needs of most schools and which can trim the cost of raw food preparation and reduce operating overhead.

2. At Westbury, steam cooking methods and equipment expedite service because of steam's speed in food preparation; assure palatable and nutritious foods; reduce the need for personnel since steam equipment obviates the fatiguing chore of lifting huge containers or the dangerous task of draining scalding water from them; require less space than other types of equipment; and permit expansion to three lunch periods without the installation of additional equipment. (Unfortunately, while many schools have adopted steam cooking methods for its economical, speedy service and have abandoned surface cooking methods as an anachronism in an age of double sessions and staggered lunchroom periods, schools, in general, are still woefully behind commercial food installations in mass feeding techniques.)

3. A cement enamel was sprayed directly on wall surfaces and partitions at Westbury. This material eliminates painting and because of its cleaning properties practically eliminates maintenance.

4. Since the community has no direct sewage facilities, an automatic refuse disposal unit was set up in the dishwashing area. Refuse, including food wastes, paper, and milk cartons, is ground to a pulp and pumped through a pipe to a hydra-extractor at the loading platform. This reduces the bulk of the refuse by almost 90 per cent and eliminates objectionable odors as well as the necessity for special handling and a garbage refrigerator.

The Net Effect

The net effect of the planning for the Westbury lunchroom was to create an unobstructed traffic pattern as the key to a smoothly functioning program. Over and above this efficiency factor are the dollars and cents benefits of durable materials and such modern equipment as the kitchen combination steam cooker and kettle. In the long run, such material and equipment pays for itself through savings in operating costs and makes a valuable contribution to solving the nutritional, sanitary, and safety aspects of our school lunch program. ■



Above: two cafeteria lines are used at Westbury with doors to serving counters at opposite ends to avoid a traffic jam.

Folding doors at right seal off serving lines from the cafeteria so that the latter can be effectively used as a study hall.

Right: the school's dietitian explains the kitchen's combination steam cooker and kettle which is capable of preparing 200-750 meals an hour.



— Market Forge Company



Decorative brass chandeliers augment the recessed cafeteria lighting in the school's relaxed dining area.

WORD FROM WASHINGTON

Federal School Assistance Proposals

ELAINE EXTON

Legislation that will authorize direct cash grants in aid for school construction for an emergency period appears likely to emerge from the House Subcommittee on General Education headed by Congressman Cleveland M. Bailey (D., W. Va.).

Key supporters of this plan believe sufficient votes can be mustered behind such a measure to move it out of the full Committee on Education and Labor chaired by Congressman Graham A. Barden (D., N. C.). Meanwhile a drive to preserve all the features of the original Murray-Metcalf bills (S. 2 and H.R. 22) which include funds for teachers' salaries continues to be vigorously pressed.

It is still too early to predict when during the 86th Congress a measure of either type may reach the House floor or whether it will be able to survive the treacherous cross-currents that await it there in which fear of federal control, integration, and an unbalanced budget are among the turbulent issues. Nor is it now clear whether the President would veto a program of this kind in the event it passes Congress.

Possibility of Compromise

The Metcalf bill (H.R. 22) will probably afford the basis for shaping up compromise legislation in the Bailey Subcommittee on General Education which takes into account the adjustments needed to surmount the hurdles in the House. These changes may include setting a terminal date for the legislation, cutting down or eliminating the grants for teachers' salaries, adding an equalization formula to assure a larger share of money for the neediest states.

Testifying in behalf of the Council of Chief State School Officers, their Executive Secretary Edgar Fuller urged the amendment of the Murray-Metcalf measure to incorporate key administrative policies em-

bodied in a bill of Congressman Stewart Udall (H.R. 2365), including the principle that "upon receipt by the state, funds allocated under this Act shall thereafter be declared to be state funds."

Usually well-informed sources anticipate that the Senate Subcommittee on Education headed by Senator James E. Murray (D., Mont.) will report S. 2 out in substantially its present form.

A possibility suggested by Governor G. Mennen Williams of Michigan in his recent appearance before this body was that the Committee assure the states additional help in meeting their total school building needs by also reporting out S. 8 sponsored by Senator Pat McNamara (D., Mich.) which authorizes an emergency two-year program of school construction with a federal price tag of a billion dollars for each of two years.

The Murray-Metcalf Measures

The Murray-Metcalf proposal backed by the National Education Association is predicated on the philosophy that the Federal Government has a responsibility to assume an appropriate share in the financial support of public schools.

This belief was emphasized by Ruth A. Stout, president of the N.E.A., at recent hearings before committees of the House and Senate. Calling it "the joint responsibility of local, state, and federal government to see that all American children are given every reasonable opportunity to reach maturity with full educational equipment to deal with the great problems that face our nation and the world, she said "our nation cannot meet the needs of 20th century education with 19th century financing."

The Murray-Metcalf legislation seeks federal grants totaling an estimated \$1.1

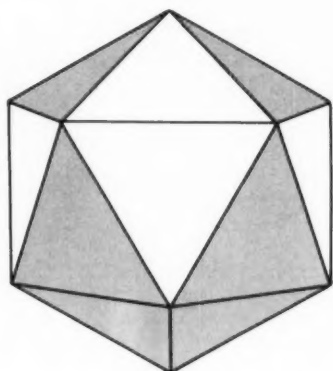
billion the first year, reaching \$4.7 billion by the fourth year, and continuing at about that level on a permanent basis. These funds could be used for public tax-supported education only.

Under the formula in S. 2 and H.R. 22 the federal money would be allotted on the basis of each state's school-age population. Each state would receive \$25 for each school-age child (aged 5-17 inclusive) the first year, \$50 the second, \$75 the third, and \$100 for each school-age child during the fourth year, and for each fiscal year thereafter. The states would be free to determine what proportions of the allotment they would use for teachers' salaries and for school construction.

The current Murray-Metcalf legislation is shorter than last year's version. The state plan mandatory in the earlier bills has been replaced with a simplified requirement that "the State Education Agency shall verify annually to the (U. S.) Commissioner (of Education) that the funds received under this Act were distributed and expended in accordance with the provisions of this Act."

A strong maintenance-of-effort provision is included which becomes effective at the beginning of the fourth year. This sets forth a formula by which a state's allotment would be reduced if its relative effort to support schools from state and local sources is less than the average effort for all the states.

The bills contain the usual assurance that "no department, agency, officer, or employee of the United States shall exercise any direction, supervision, or control over policy determination, personnel, curriculum, program of instruction, or the administration of any school or school system."



i'co·sa·he'dron

Webster says,
"a polyhedron of twenty faces."

Translated,
it's the strongest, best balanced carcass pattern that can be applied to a ball.

$$K(k) = \int_0^{\pi/2} \frac{d\phi}{\sqrt{1-k^2 \sin^2 \phi}}, \quad \pi_1(r, k) = \int_0^{\pi/2} \frac{d\phi}{(1+\sin^2 \phi) \sqrt{1-k^2 \sin^2 \phi}}$$



The new label tells part of the story . . .

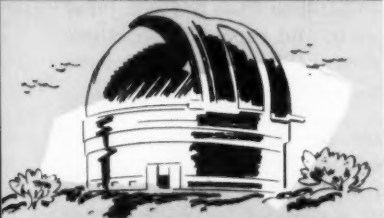
There's that word—*icosahedron*—and, behind it, an odd sort of geometric figure.

It means that, for the first time, fundamental mathematics have been applied to ball building—creating a perfect, predetermined pattern—placing a uniform nylon carcass on every new Voit ball.

That's why Voit chose to depart from more than a generation of manufacturing and sales philosophy to market this new type of ball.

After countless control tests and five years of field testing, the most cautious authorities in the sporting goods business are convinced that *this is the finest ball ever made.*

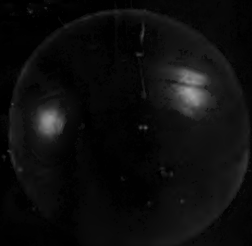
And, you can prove it . . .



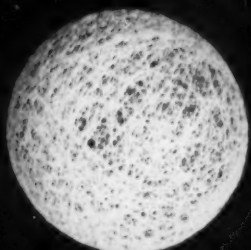
Until Now...

There have been a number of manufacturing methods.

In its continued growth, the industry has pioneered and developed a variety of ways to build a ball—each with its advantages and its limitations.



The all-rubber ball, came on the scene a generation ago, providing economical performance and substantially better wear than leather. But, in order to retain the shape of the ball and to strengthen it for the beating taken during continual play, the ball needed some form of structural reinforcement—a carcass.



Cord-winding came into being as an early, improved method of reinforcing the ball. But, in giving it structural strength, it also created a problem that was built into every ball.

The random coverage of threads often loosened—taking a toll in uneven wear, lumps and soft spots—causing the ball to go out-of-round.



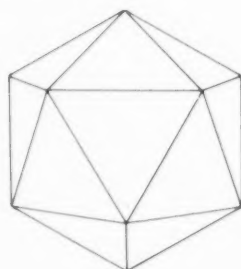
Voit abandoned this method, making a genuine stride forward by developing a fabric lining that provided a strong, uniform bonding over the bladder and beneath the cover.

Voit's "single pole" application offered near-perfect coverage in multiple layers, but—since the carcass was built by hand—even this most advanced method was susceptible to human error and left room for improvement.

The Greeks had a word for it...

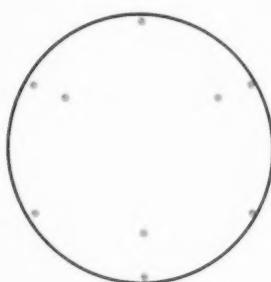
But it took years of research by Voit's best technical personnel, the enthusiastic assistance of several theoretical mathematicians, and astronomers from one of the nation's leading observatories to find the answer.

And, of course, it had been there all the time . . . since ancient Greece . . . neatly tucked away in the back of anybody's geometry text . . .

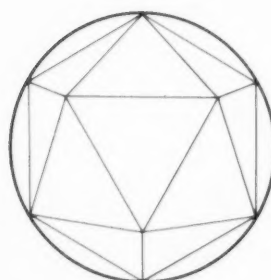


Icosahedron

It's a perfectly symmetrical polyhedron, possessing the *absolute maximum* number of equidistant points that can be placed on a sphere, **making it the strongest, best balanced carcass pattern that can be applied to a ball.**



Next, place that pattern on a sphere and repeat it countless times until it uniformly covers and contains the sphere.



Now, convert that theory, that formula, to a highly complex battery of machines that are full automated and capable of precise performance. To guide these machines get the very latest digital computer to provide an electronic guidance system, monitoring these machines for accuracy and control every split second during fabrication.

Then, provide those machines with the most advanced synthetic filaments to spin repeated, predetermined patterns on the bladder . . . over and over again.

Voit did.*

*11 United States and foreign article, apparatus, methods and machine patents applied for.

LET'S BUILD AN ENTIRELY NEW BALL...



Fig. 1

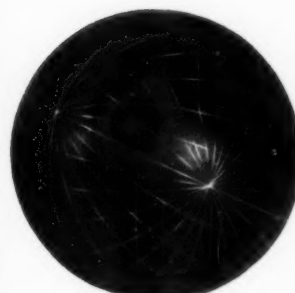


Fig. 2

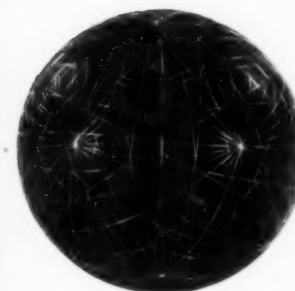


Fig. 3

Start with the best butyl bladder, containing Voit's superior self-lubricating valve.

Then, watch the filaments being placed on the bladder at the first set of poles. (Fig. 1)

Yard after yard of nylon is spun on to the carcass, and every strand is working as the machine makes a predetermined shift to a new set of poles. (Fig. 2)

The electronically-controlled machine continues until it completes a winding cycle at each of 12 poles. Take a very careful look and you'll see the first icosahedron pattern. (Fig. 3)

After countless repetitions of this basic icosahedron pattern, each originating from a different set of poles, the bladder is uniformly and completely covered. (Fig. 4)

Each strand of nylon is then impregnated with a sealing agent until it can be forever locked in place—fused into a super-strong, continuous carcass by precision curing in a smooth mold.

The finished carcass is a perfectly smooth sphere, providing an ideal base for the cover which is now assured of absolutely uniform thickness. (Fig. 5)

The cover itself is an entirely new composition, and a new applicable process assures uniform thickness. This means exceptional performance and "feel" plus wear qualities that surpass any other type cover on the market. (Fig. 6)

The important news about the new Voit Icosahedron ball is that the buyer is now assured of balanced wear. The finest carcass can't give full value without an equally fine cover. The most durable cover is of little value with an inferior carcass.

Voit's balanced icosahedron construction combines:

- Maximum carcass life
- Maximum cover wear
- Complete uniformity
- Official performance for the life of the ball



Fig. 4

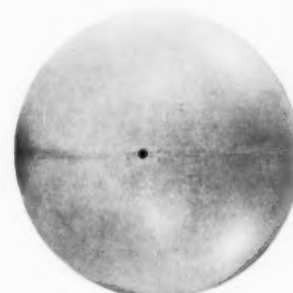


Fig. 5



Fig. 6

and the test results prove it . . .



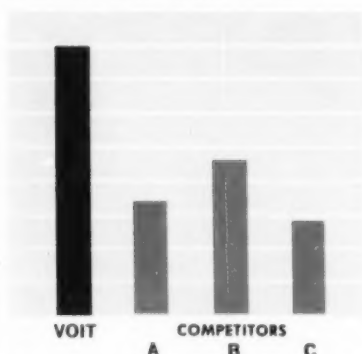
The Proof*

Here's a summary of a few of the more significant tests to which any ball can be put — in the laboratory or in actual play — showing how the new Voit Icosahedron ball scores in some of the most important test categories.

For those interested in detailed technical results, your Voit representative will be more than pleased to provide specific information on performance, life, shape retention, weight, inflation, cover wear, weather resistance and many others.

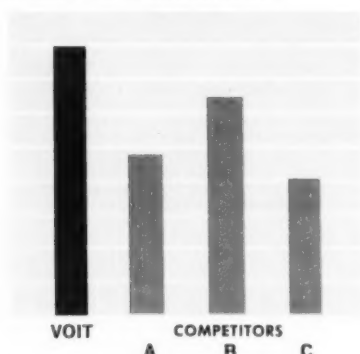
But, here's a sample:

1. PERFORMANCE LIFE®



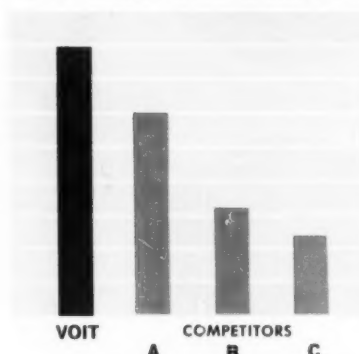
Measured by standard bounce machine and shaper tests to the end of usable life. Some balls fail because of rapid cover wear while others become so badly misshapen that the test can no longer be continued.

2. SHAPE RETENTION®



Measuring the hidden weaknesses that come from carcass failure, a lump, a blister, an area where a seam has weakened and out-of-roundness has begun. Often the cover is as good as new when the ball becomes unplayable.

3. COVER WEAR RESISTANCE®

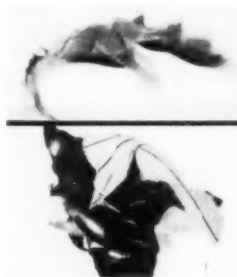


Measured by bounce machine and Taber Abrader. This is an important feature, of course. But it is only one important ingredient in the total strength, life and performance of any ball.



ball permits less than $\frac{1}{4}$ ounce variance. Test it yourself!

We made a final test that we don't recommend your trying. It introduced some ear-splitting testimony to the balanced construction of the new Voit ball!



Placing an inflating needle in the ball, we let the pressure build. After taking an incredible amount of inflation, the ball *shattered* into a number of small pieces—rather than experiencing a blow-out at a weak point. *There are no weak points in the new Voit ball.*

You may have some other tests of your own, but this much is certain: *The old standards no longer apply.* The new Voit Icosahedron ball has set new standards by which to judge the worth of any ball. We know what the new ball will do.

We respectfully suggest you *prove it to yourself...*

*Double Your
Money Back*

Buy two Voit CB2 Icosahedron Basketballs.

Put them into test along with those of any other manufacturer—for wear, performance, and "feel".

If they do not outperform all others, return them to us with your test results and your comments and we will refund to you twice their full price.

VOIT®
*America's Finest
Sports Equipment*

Subsidiary of American Machine & Foundry Company
New York 11 Chicago 11 Los Angeles 11



Statements on Need

In introducing Senate bill 2 which is sponsored by a bipartisan group of 32 additional senators, the Honorable James E. Murray (D., Mont.) informed his colleagues that this number had been purposely reserved "to emphasize the priority it should . . . receive."

Asserting that "it is time to 'remove the halo' from the 'balanced budget' and consider the relative ability of federal, state, and local governments to pay for education," Senator Murray explained, "for one thing, the Federal Government can borrow money at cheaper interest rates than state and local sources can."

He said that between 1948 and 1957 state and local governments increased revenues by 119 per cent, but their bonded indebtedness increased by 182 per cent. "During this same period," he continued, "federal revenues increased 81 per cent, but federal indebtedness increased by only 7.2 per cent."

As of March 1, more than 20 Representatives had introduced similar or identical measures to S. 2 in the House. Representative Lee Metcalf (D., Mont.), the author of the first of these companion bills, in describing the provisions of H.R. 22 to fellow Congressmen estimated the school housing shortage at 140,000 classrooms. He reported that "despite prodigious efforts of states and local districts to build adequate educational facilities, the rate of construction barely kept pace with increased attendance and obsolescence in the past year."

In Congressional appearances to support the official viewpoint, U. S. Commissioner of Education Lawrence Derthick cited data available to the U. S. Office of Education to show that "the backlog of classroom need which stood at 140,500 in the autumn of 1958 is estimated at not less than 133,500 in the fall of 1959 (and) current replacement need is estimated at 16,800 per year, on the basis of the experience of 1957-58 and 1958-59, or a total of 84,000 for the 5-year period."

Commented Secretary of Health, Education, and Welfare Arthur S. Flemming: "According to the estimates of the states, our public elementary and secondary schools today enroll almost 2 million pupils in excess of their normal capacity, while another 2 million pupils are housed in obsolete or inadequate buildings. These children are being shortchanged in their education by half-day sessions, seriously overcrowded classes, and makeshift facilities."

"If the present high rate of school construction (68,000-70,000 classrooms) could be maintained for the next five years, the national classroom deficit at the end of that period would still remain a national problem of major proportions. More than 2 million children would still be educationally underprivileged."

The Administration's Plan

In contrast to the Murray-Metcalf legislation calling for a "massive transfusion" of federal funds to the states for public school construction and teachers' salaries on a permanent basis, the Administration's proposal embodied in H.R. 4268, intro-

duced by Representative Peter Frelinghuysen, Jr. (R., N. J.), and S. 1016, sponsored by Senator Thruston B. Morton (R., Ky.) and several other Republican Senators, would authorize a 5-year emergency program, permitting the Federal Government to advance annually half of the funds required by needy school districts to pay the principal and interest charges (debt service) on bonds issued by the districts to finance school building projects.

As explained by Secretary Flemming, the Administration bills, which seek to stimulate greater application of state and local resources toward the total solution of their educational problems, require that each state make a financial contribution equivalent to that of the Federal Government. The school districts which receive federal advances would be expected to eventually repay them to the Federal Government.

The state's participation could take one of three forms under the Administration bills: either capital grants, loans, or debt service advances.

With regard to capital grants all states could participate, Secretary Flemming testified, by appropriating state funds to make capital grants to pay one half of the construction cost of needy school districts. In states which select this method the Federal Government would advance all the debt service on the bonds issued by the school district to finance the other half of the construction cost.

All states, according to Secretary Flemming, could also participate by appropriating state funds to make loans to needy school districts to meet one half of their construction cost, but states selecting this method would have to defer or waive repayment of the principal or interest on these loans in any year in which the school district's exertion of its reasonable tax effort does not produce sufficient revenues to meet repayments.

If a state chose the alternative of committing itself to advance one half of the debt service on bonds issued by the school district to finance school buildings in the

same manner that the Federal Government commits itself to advance the other half of the debt service, the state could avoid large initial capital outlays for grants or loans, Mr. Flemming continued, and, like the Federal Government, spread the cost of their participation over the 20 to 30 year period during which the school district bonds are repayable.

Under the Administration program, the maximum principal amount of bonded indebtedness which could be covered by Federal-State debt service commitments would be \$600 million a year. This amount would be allocated to the states on the basis of school population, per capita income, and school financing effort. Department of Health, Education, and Welfare officials claim such an arrangement could make it possible for the states to initiate up to \$3 billion worth of public elementary and secondary school construction during the 5-year period in which commitments could be made.

Maintaining that the other plans being considered by the Congressional education committees to deal with the schoolhousing shortage "would unbalance the Federal Government's budget for 1960," Secretary of Health, Education, and Welfare Arthur S. Flemming told the members that "the Executive Branch, therefore, cannot support them . . . because we believe that deficit spending on the part of the Federal Government under existing conditions would set into motion forces that would lead to serious inflationary pressures . . . (which) would undermine our educational system as well as other aspects of our national life."

Congressional Reactions

The debt-service payment stratagem tailored to fit Administration budget policies, however, evoked a lukewarm response in Congress even on the part of many Republicans.

Replying to charges that the Administration's program is "inadequate," Secretary Flemming said the number of classrooms that could be constructed under it "namely, 75,000 over a 5-year period, is comparable to previous proposals."

Representative Lee Metcalf (D., Mont.) challenged the Secretary's assertion that any state could qualify to build schools under the Administration's proposal in one of three ways—capital grants, loans, or debt service advances—commenting "My state of Montana is foreclosed on all three approaches."

Among the lawmakers expressing doubt concerning the ability of most of the states to participate in the Administration's plan "at least for several years" was Congressman Frank Thompson, Jr. (D., N. J.) who stated that "if it is assumed that most of the states would have to incur indebtedness the obstacles are terrific."

He cited figures indicating that 17 states would have to pass constitutional amendments in order to incur increased indebtedness, referendums would be required in at least 18 states, and even if the states could finance their part of the program out of current revenues, only 17 state legislatures will meet in 1960 and the other 32 would have to wait until 1961. ■



the AMERICAN SCHOOL BOARD JOURNAL

An Independent Periodical of School Administration
William C. Bruce, Editor

A LONGER SCHOOL YEAR

THE brevity of the school year which now exceeds 180 days in only a few communities has been a point of justifiable complaint by well-meaning observers of the educational scene. Our present plan wastes human resources as well as school plants. Improved farming methods, as well as the growth of our urban and industrial economy, all point to the ridiculousness of the further acceptance of the tradition of a three months' summer school vacation.

The proposal for dividing the school year into four quarters and requiring children to attend only during three quarters, entails serious difficulties of administration, the orderly arrangement of family life, and the satisfactory recreational use of children's vacations. These difficulties make the plan far less desirable than the simple lengthening of the present school year to full 200 days, with one week's breaks at Christmas and Easter, and vacation of eight or nine weeks during the summer season.

Such increase of the actual number of days devoted to instruction would enable schools to more fully develop their year's program. It would not overtax teachers or children. It would require some increase in the cost of instructional materials and building services, and it should certainly look attractive to teachers in the form of added pay. The longer school year will give all children a better opportunity to succeed.

AT THIS LATE DATE

IT SEEMS impossible at this late date that it is necessary to repeat the dictum that meetings of boards of education should be open to the public and the press. And still the state of Massachusetts has found it necessary within recent months to enforce new legislation under which meetings of school committees must not be held behind closed doors, but must be announced publicly at least 24 hours in advance. The law wisely permits committees to hold emergency meetings when action is immediately necessary to protect the public interest. The only secret sessions possible under the law are those which relate (1) to personnel matters that might harm the professional or personal reputation of a school employee under discussion, (2) the acquisition of real estate or other property which must involve increase in cost to the school district, (3) matters of public security which need to be discussed or acted upon and which under a federal or state law cannot be made public without harm to a proposed undertaking.

This Massachusetts statute formalizes principles of publicity and of secrecy which have been widely accepted since the turn of the century. Any school board which acts within such a policy will avoid suspicion and rightful criticism of its actions. It is little short of disgusting to find that the

real business of a school board is regularly transacted at secret sessions from which the newspapermen, school personnel, and interested citizens are barred, while a brief formal meeting, marked by cut-and-dried resolutions, disposes of the same business without a clue to the true mind of the professional executive and of the board members.

A SCHOOL'S ATMOSPHERE

THE concluding paragraph of the West Virginia State School Survey Report, released recently, recommends an atmosphere of serious respect for education as the most important element of success:

Education occurs in an atmosphere that either encourages or discourages serious study and learning. Educational climate is the residue of tone or mood that pervades the schools and underlies the community's attitudes and actions toward the schools. Is learning cherished by pupils and parents, or "sissy" and scorned? Is it encouraged and rewarded, or merely endured? Is it popular? Does the school have a favored place among the organizations of the community? Do teachers have the genuine respect of their neighbors? Is the school plant attractive, a symbol of deep community interest in and concern for the school? Does loyalty to school transcend the hope that it will win in interscholastic competition? In short, do pupils feel impelled to education by sensing that it is an exciting, serious, approved, normal activity? A favorable atmosphere cannot be legislated into being; it does not grow out of recommendations. It is a positive disposition created by myriads of day-to-day expressions and actions. Its lack is a school's greatest deficiency. If it exists, it is a school's greatest asset.

The school board has a serious responsibility to set the pace for the community's support of a high regard for education, for the professional staff, and for the intellectual and moral products of especially the secondary school.

A PROFESSIONAL ORGANIZATION?

THE recent AASA convention in Atlantic City was attended by some twenty thousand educators and school board members, but the referendum vote intended by the officers to professionalize the organization attracted only some 1400 votes, of which less than a thousand votes favored a master's degree in administration or its equivalent, as a prerequisite for election to active membership. The lack of interest — or was it tacit opposition? — is puzzling, when it is recalled that the older professions and even newer occupations such as social service, require a graduate professional degree for membership in their national organizations and such membership is almost completely needed for employment in an executive position.

There is confusion in the legal license requirements of the several states as applied to city and other school district superintendencies. So long as this condition continues, it is inevitable that men holding such offices successfully will unconsciously evade if not oppose the limitation of AASA membership on the basis of a graduate degree in administration. For the next decade, it would seem wise to recognize successful experience rather than attendance at some graduate school.

Democracy treasures the integrity and development of each person, irrespective of age. More than that, it attaches value to the co-operative and potentially self-directive group with free access to facts and with the freedom to deliberate and to express differences. Finally, a system of democratic beliefs includes the right and obligation of individuals to participate in the making of decisions that affect them. — *Howard Wakefield.*

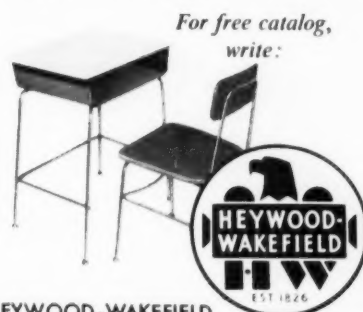
WON'T STAIN



HeyWoodite Won't Stain—Won't Burn—Won't Break

This dramatic demonstration proves that HeyWoodite's non-porous surface has positive stain resistance. Molded under extreme heat and pressure, HeyWoodite has the same strength, the same high density and color throughout. Surfaces and edges have permanent smoothness and uniformity.

Because HeyWoodite is virtually indestructible, it saves your school system substantial sums in maintenance year after year. Available in chair seats and backs, desk tops and tablet arms, HeyWoodite solid plastic with TrimLine lifetime chrome frames is your soundest investment for long run economy.



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Entirely Eliminates Refinishing Costs

Three Groups Hold Special Meetings at NSBA Convention

HAROLD V. WEBB

Associate Executive Director for Field Services, NSBA

A great deal has already been written about the recent highly successful NSBA convention in San Francisco, January 25-28, 1959. It is believed that our readers will be interested in some of the activities of the groups that operated within the framework of the NSBA and carried on some significant programs at the time of the convention, and which have not been reported. We refer specifically to the state boards of education, boards of cities of over 300,000 population, and the secretaries of the state school boards associations.

State Boards of Education

In general, state boards of education and local boards of education have the same interest and the same objective—a sound education for the boys and girls of a state—yet the detailed responsibilities of each are quite different. Recognizing a commonality of interest, the state boards of education have been exploring and developing ways in which the NSBA can be of service to them. Starting some three years ago, S. E. Brogoitti, member of the state board of education of Oregon, and also a member of the board of directors of the National School Boards Association, encouraged incorporation of activities for state boards of education in the National School Boards Association convention program. At the time of the recent San Francisco convention, the state boards of education group had a vigorous and interesting meeting which was attended by a large number of state board members representing some 13 states. The program included speeches and discussions on such topics as "Working Relationships Between Chief State School Officers and the State Boards of Education," led by Dr. Roy E. Simpson, superintendent of public instruction, state of California, and "A Layman Looks at Russian Schools," by Mrs. Anna C. Petteys, member of the Colorado state board of education. Mrs. Petteys recently completed a trip to Russia where she visited and observed Russian schools in operation.

The future effectiveness of this group was made stronger and the achievement of its ultimate goal made more likely by the action of this body when it organized and elected officers. George P. Whitman, Jr., of the Georgia state board of education was elected as chairman. Whitman is also a member of the NSBA board of directors. Mrs. Anna C. Petteys of Sterling, Colo., and member of the Colorado board of education, was elected first vice-president, and Robert A. Manchester II, member of the Ohio state board of education, secretary-treasurer. Other officers selected by the group are: S. E. Brogoitti, western region co-ordinator; Dr. Charles Rochelle of Evansville, Ind., as eastern co-ordinator. Five area vice-presidents were chosen: Dr. O. H. English, Pennsylvania, northeastern region; Henry A. Stewart of Georgia, eastern region; L. L. Huntley of Minnesota, mid-western region; Allen Lynch of Arkansas, western region; Francis I. Smith of Oregon, Pacific region.

It was suggested that members of state boards of education in the various states hold regional meetings with chief state school officers once during the year. Other activities to be carried on by the group are: increasing the exchange of information between state boards of education; discovery of problems of common interest; and assistance in planning an interesting and informative program for next year's annual meeting at the time of the NSBA convention. The 1960 convention will be held in Chicago, April 24-27.

A year ago the NSBA board of directors developed a membership for state boards of education, and Georgia, Arkansas, and Tennessee have already affiliated with the national organization. Work will be carried on throughout the year to encourage state boards to become members of the National School Boards Association. It is hoped that in this way all lay boards responsible for public education at the state and local level can unite in one strong, common effort for the improvement of public schools.

Boards From Cities Over 300,000 Population

This group includes the boards of education from the 40 largest cities and school districts in the United States. For a number of years boards of education from these school systems have expressed their interest in problems which have peculiar concern for schools of large cities. Some of the people who have been active in leadership for this group are: Dr. H. C. Willett of Los Angeles, Dr. Fred W. Heinold of Cincinnati, Mrs. Fred L. Paul of St. Paul, and Andrew G. Clausen, Jr., of the New York City board of education.

At the first meeting, the board members heard John W. Shreve, assistant superintendent of schools, Cincinnati, speak on the subject, "Present and Future Financing of Public Education in America." A general discussion was held for the remainder of the meeting. At the second session of the board members from cities over 300,000, they discussed "What Is Being Done for the Academically Talented Student?" In the business session, Isadore Samuels of Denver was elected as chairman, and Mrs. Lois B. Heath of Denver was elected as secretary. Suggestions were made by members of the group for items which could be included in discussions at next year's convention and an attempt is now being made to gather further suggestions from members of boards of education from all the cities listed within this population classification.

Some of the suggestions which have already been made and which may be used to select program topics for 1960 are: "A definitive study of the contrasts between policy determination and school administration"; "Are double sessions being used effectively in any of the large city systems?"; "Is there a trend for revising certification requirements in such a way that more liberal arts graduates are being used to replenish the teacher supply."

Secretaries of the State School Board Associations

As long as there has been a National School Boards Association, the work of the various state school board association secretaries has been recognized to be of vital importance to the success of the school board movement, not only at the state level, but also at the national level. Under the leadership of W. A. Wettergren of Minnesota and Dr. L. B. White of California, the secretaries group met on January 25 and discussed such problems as: services the state associations provide to school boards; how state associations have assisted with the school insurance program; the development and operation of conventions; tips on preparing association bulletins; a discussion of the relationship between the state association and the national association; and services which the NSBA can provide to the various state associations.

One of the highlights of the meeting was a report of the Lowe-Henderson study. This study was initiated one year ago at the time of the Miami Beach convention and was carried on by Jack Lowe of South Carolina and Ed Henderson of Florida. These association leaders made a study of

(Concluded on page 60)



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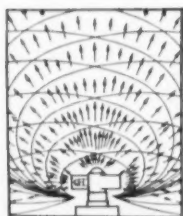
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NSBA REPORT

(Concluded from page 56)

the quantity and quality of service provided by state associations. An attempt was made to summarize the method of operation and how decisions were made in the various state school board associations.

The group re-elected W. A. Wettergren of Minnesota and Dr. L. B. White of California to serve as president and vice-president. This organization is working with the NSBA in the development of loan packets, evaluation of field services, and the institution of additional field services that will be available and of value to the various state associations.

A bound report of the secretaries meeting along with the copies of speeches, tabulation of studies, and other vital information has been forwarded to each state association headquarters office.

The group is improving its program of services each year and looks forward to the time when a special in-service meeting of several days' duration can be held in the midyear between annual NSBA conventions.

ASSOCIATION NEWS

(Concluded from page 34)

shared by the administrators who heard (courtesy of the Associated Exhibitors) the wizard, Harvey Lavan (Van) Cliburn, demonstrate why he zoomed to world prominence as a pianist extraordinaire, as a fitting climax to the convention's entire flirtation with the arts.

The convention's resolutions were shunted aside for the much ballyhooed constitutional amendment, limiting AASA membership to administrators with graduate work after January 1, 1964. As a judgment of its significance to administrators, the amendment polled votes from less than 7 per cent of the registrants but carried by a 3 to 1 affirmative margin.

As a final salute, AASA president, C. C. Trillingham, superintendent of schools, Los Angeles County, Calif., stated that "We are pleased to have so many educational allies, including school board members... join us in Atlantic City."

COMING CONVENTIONS

April 1-5. American Society for Public Administration, Washington, D. C. Secy: John Keith, American Society for Public Administration, 6042 Kimbark Avenue, Chicago 37, Ill.

April 8-10. Michigan School Business Officials, Pantlind Hotel, Grand Rapids, Mich. Secy: A. C. Lamb, Wayne State University, 5454 Cass Ave., Detroit, Mich. Exh.

April 13-16. Department of Audio-Visual Instruction, Seattle, Wash., Olympic Hotel. Secy: Mrs. Mickey Bloodworth, Department of Audio-Visual Instruction, 1201 Sixteenth St., N.W., Washington 6, D. C.

April 15-18. Southeastern Assn. of School Business Officials, Asheville, North Carolina, Battery Park Hotel. Secy: Paul L. Franklin, Meridian Public Schools, Meridian, Mississippi.

April 23-24. Indiana Assn. of School Superintendents and Business Officials, Indianapolis, Ind., Indiana State Teachers Assn. Building. Secy: Mr. Paul Greisel, 1605 E. 86th St., Indianapolis, Ind. Exh.

April 23-25. Massachusetts Assn. of School Committees, Inc., Swampscott, Mass., New Ocean House. Secy: James W. Whitehead, Box 372, New Bedford, Mass. Exh.

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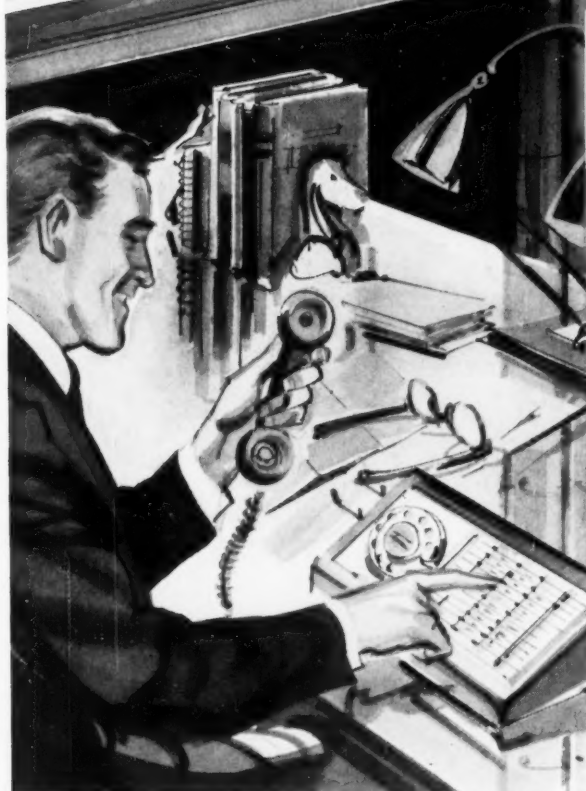
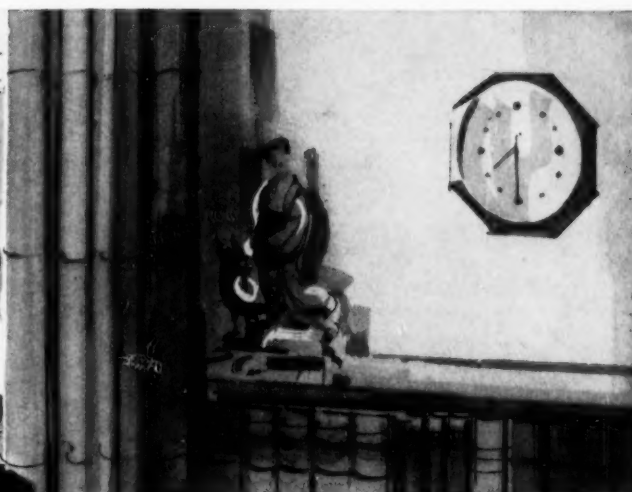
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SCHOOL LAW

(Concluded from page 45)

court reasoned: "The purposes stated [in the notice] were all related to providing additions and improvements to school facilities." So plainly related were these purposes, the opinion concluded, "that, united, they form in fact but one rounded whole. . . ."

These cases are illustrative of the general willingness of the higher State courts to give a liberal interpretation to the "one-purpose" or "single question" provision relating to bond issue elections which exist in the school law in many states.

Another area where the courts have recently applied the "liberal construction and substantial compliance" principle concerns the procedures to be followed in changing school district boundaries.

In a recent New York case⁵ the pertinent statute provided that in laying out a central school district the State Commissioner "shall include only territory of suitable size conveniently located for the attendance of pupils and having a sufficient number of pupils for the establishment of a central school."

⁵Application of Bd. of Educ. of Union Free S.D. No. 3, Town of Oyster Bay et al. In New York Supreme Court, Appellate Div. (1958). Cited as 177 N.Y.S.2d 169 in the West National Reporter System.

In denying a suit based on the contention that the duty of Commissioner, in this regard, was to consider *only* the conditions of geographical size and number of pupils, and that to consider any other factors would make invalid any actions he might take concerning boundary changes, the court made several significant comments.

"To say that is all there is to it, is grossly to underestimate the responsibility and duty of the Commissioner. He could, and certainly should in the conscientious exercise of his function, take into consideration a wide range of questions of sound administration and good educational policy and practice, standing well above the *minimal statutory requirements* of size and number." (Emphasis added.)

Clearly, the opinion concluded, assuming these bare conditions of size and number have been met, the Commissioner had the duty of considering also "whether it is wise and desirable" that the boundary changes be made.

A recent Missouri case⁶ is also illustrative of the strong judicial conviction concerning the "liberal interpretation" principle.

The applicable Missouri statute provided that, in connection with boundary change petitions, "ten qualified voters . . . may petition the district boards. . . ." In this particular instance, however, the school district board refused to honor the petition, claiming that some of the petition signatures were "not genuine," since in the case of one specific signature—as was admitted by all parties concerned—the wife of a signer had signed both her own and her husband's name thereon. It was not denied that this had been done only upon the authorization of the husband, who had forgotten his eyeglasses.

In upholding the validity of this petition signature—and hence denying the propriety of the local board's action in refusing to honor it—the court made two significant comments: (1) Specifically, the statutory provision in question, "says nothing about *personal* signatures"; and (2) Provisions in other Missouri school statutes did specify that the personal signing of certain petitions would be required in circumstances not here pertinent.

Thereupon the court held that the statute here involved would be interpreted as "not indicating . . . an intention to require personal signatures exclusively."

The significant point to be recognized here is that our courts are quite generally inclined to give a liberal—rather than a strict—interpretation to the attempts of a local school board to comply with specific school law provisions, wherever, in so doing, the rights of citizens generally are not violated; the over-all purposes of the pertinent provision in particular, and public education in general, are thereby advanced; and no question exists as to the "good faith" intent of any related actions taken by the local school authorities.

No guarantee can exist, of course, that this principle of liberal construction and substantial compliance will be applied by all courts on all occasions, since individual circumstances must also be given appropriate consideration.

But any survey of recent court decisions will show that this principle is still one of almost universal acceptance. ■

⁶State of Missouri ex rel Kugler et al. v. Tillston et al. In Missouri Supreme Court (1958). Cited as 312 S.W.2d 753 in the West National Reporter System.

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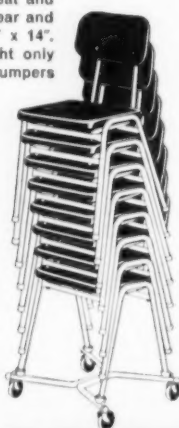


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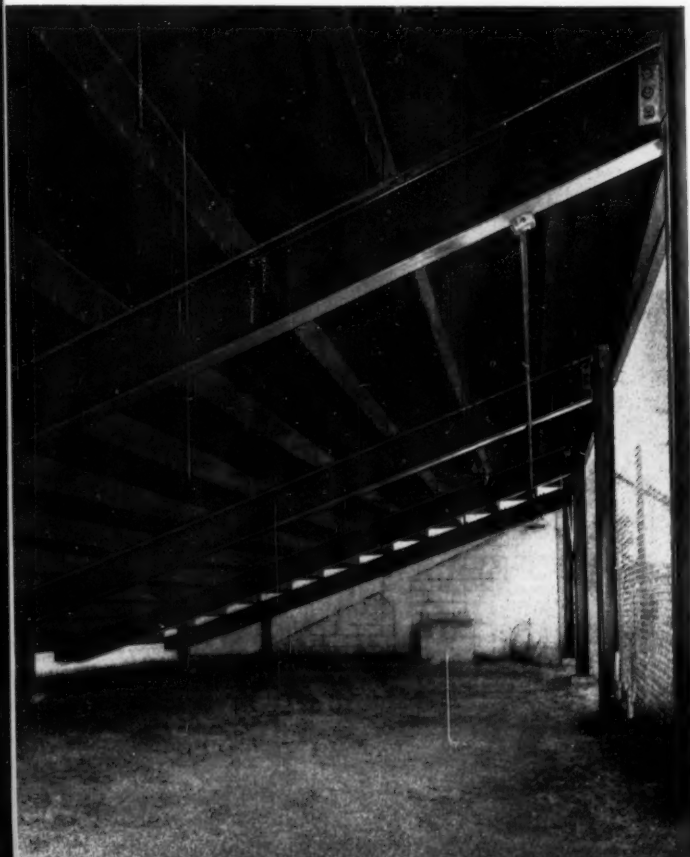
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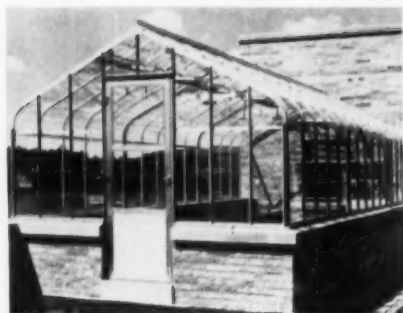
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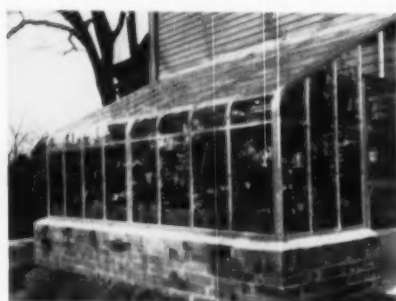


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Two popular models of greenhouses, the lean-to, below, and the roof above, that can be easily added to the existing school plant.



SCHOOL PRODUCT IDEAS

Greenhouses Expand Science Facilities

Expanding science classes in recent years has caused a corresponding need for expansion of plant and equipment for teaching science. While many phases of this expansion may be time-consuming and expensive, some school districts have learned that enlargement of their plant for broadened botany and biology instruction can be accomplished quickly and easily with the addition of a greenhouse.

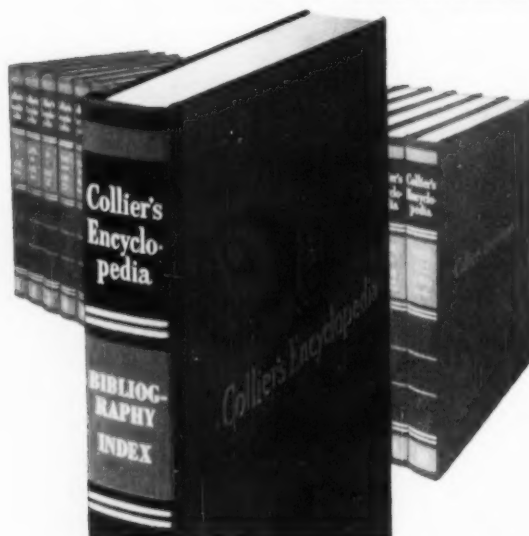
In the Lakewood High School, Cleveland, Ohio, for example, a class of 20 teen-agers, enrolled in the horticulture class, meet in the school's greenhouse twice a week. Working closely with the biology department, pupils learn how to take cuttings, grow plants from seeds, etc. "In addition to experiment, classroom instruction, and year-round growing of plants for study pur-

poses," according to Mr. Paul R. Young, head of school gardens for Cleveland's board of education, "our greenhouses serve the very practical purpose of starting seedlings for students' summer home gardens."

Various greenhouse models are available for different situations: the lean-to model can be built right against the school wall; the roof version offers easy access during winter and freedom from glass breakage due to adjacent playgrounds; and free-standing models are used near large planting areas.

(For further information on greenhouses suitable for schools, circle number SPI-1 on the Reader's Service Section, page 77.)

A NEW DIMENSION IN ENCYCLOPEDIA BIBLIOGRAPHIES



Deliberately departing from conventional encyclopedia practice, the editors of Collier's Encyclopedia have grouped all bibliographies as a separate unit in the first 177 pages of Volume 20. This unique concept in encyclopedia publishing presents in a single bibliography, under 1,132 clearly defined subject headings, more than 10,000 reference books encompassing every field of knowledge. Titles under the various subject headings are carefully graded, from the simple to the complex. Books were selected because they are readily available, up-to-date, and printed in English. Annotations were added where necessary. In addition, through the 400,000-entry Index, each volume is coordinated with the text of the encyclopedia.

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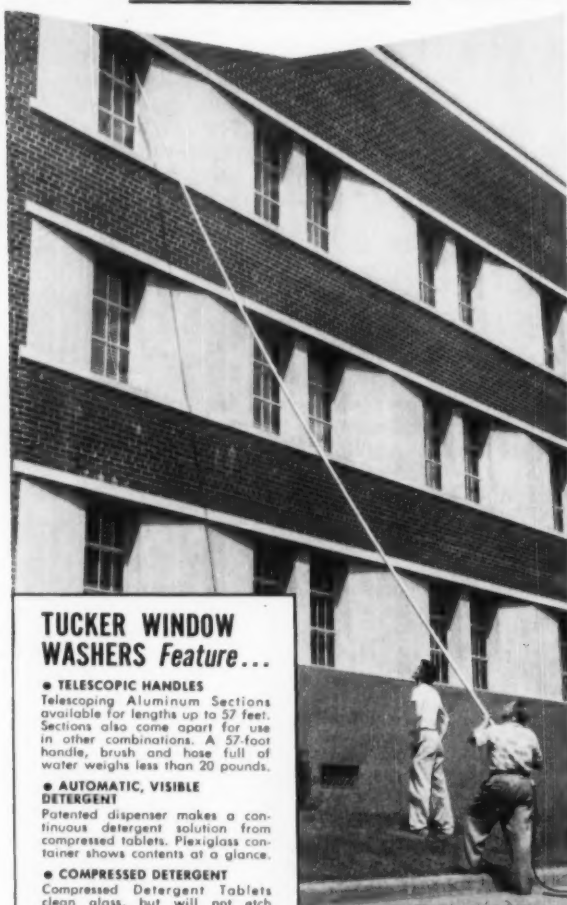
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THE SCHOOL SCENE

(Concluded from page 10)

Regents in December, 1951. It was adopted in Herricks in July, 1958. Bertram Daiker and Porter Chandler, lawyers, represented 16 residents favoring the prayer, who have asked that the petition be dismissed on the ground of improper judicial procedure and lack of sufficient facts.

FELLOWSHIP PROGRAM APPROVED

U. S. Commissioner of Education Lawrence G. Derthick has announced approval of the first graduate fellowship programs under the National Defense Act.

Federal funds have been approved for new or expanded graduate education programs in 48 colleges and universities in 39 states, Hawaii, and the District of Columbia.

The programs will provide 160 fellowships during the 1959-60 year, at a total federal cost of \$400,000. With the launching of this program to augment the supply of college teachers and scholars, eight of the nine major programs are now in operation.

GROUP COUNSELING PROJECT

A pilot project, combining group counseling for adolescents and education for their parents, has been developed by New York's Nassau County Mental Health Board for the school systems of Great Neck, Manhasset, Port Washington, Roslyn, and East Williston.

The program will offer immediate help to boys and girls between 14 and 16 who would not ordinarily be reached by any counseling service. The emphasis will be on prevention of serious emotional disturbances among those youngsters considered to be "trouble-susceptible."

The teen-agers will be referred to the project by school psychologists and will meet in groups of seven to nine once a week. The parents will meet separately once a month. The schools will take the responsibility of case finding and make the initial arrangements with the youngsters and their parents.

NEW ADMINISTRATIVE SETUP

In Wichita, Kans., an important new high school organizational plan has been adopted by the board of education. The plan, to be applied to the South High School next September, will save more than \$20,000 a year. The major change is the elimination of department heads and addition of second assistant principal. A regular classroom teacher will act as department chairman but will be relieved of administrative duties. The second assistant principal will act as director of curriculum, and two counselors will be appointed. All athletic activities will be handled by an athletic director, eliminating a girls' physical education coach; two librarian clerks will replace the assistant librarian in the former setup.

SCHOOL LUNCH ACCIDENTS SURVEY

The Bureau of Labor Statistics plans to conduct a special study of injuries to school lunchroom personnel during 1959. Approved by the American School Food Service Association, the program will obtain injury and employment data by occupation from nearly 5000 public school districts. From those data, injury rates will be computed by occupation, by geographic region, etc., thus indicating where safety activities should be concentrated.

When the study is completed, a final report of the findings of the survey, furnishing statistical analysis, plus descriptions of typical accidents and suggestions by safety engineers as to method of diminishing those hazards will be available from the Industrial Hazards Division of the Special Studies Branch of the U. S. Department of Labor.



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NEWS of PRODUCTS for the Schools

ELECTRONIC TEACHING CENTER UNVEILED AT AASA

"Tomorrow's look" in classroom educational facilities was unveiled by the American Seating Co., Grand Rapids, Mich., at the recent American Association of School Administrators convention. The Electronic Teaching Center would place helpful audio-visual equipment right at a teacher's finger tips.



The basic unit is a teacher's desk, L-shaped and measuring 4 by 8 ft. over-all. It contains a 21-in. screen television receiver. At the touch



of a button the TV receiver swings from its hidden position behind a decorative metallic screen at the front of the desk, coming to rest on the desk top, facing the student. A control knob adjusts the set for closed circuit or direct



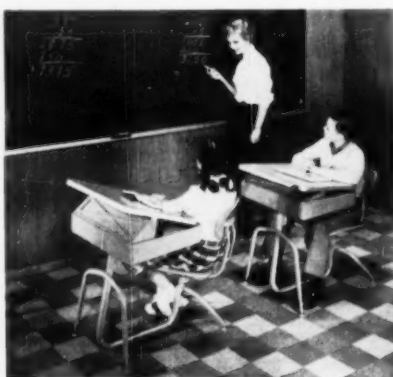
telectasts. Additional controls will automatically close the draperies in the room and turn off lights for proper viewing.

In a convenient drawer is a tape recorder

for recording lessons and group discussions or for enriching classes with music and prepared lessons. In the right-hand panel there is a dial telephone with retractable cord, convenient yet unobtrusive.

A 110-volt electrical system operates all controls from a self-contained motor housed in the Center. The desk has a wide Amerex plastic top that allows plenty of work area. There are also two built-in storage cabinets and three drawers for the teacher's supplies.

A blue and coral color scheme is carried out in a specially designed teacher's chair. Foam back rest and seat are covered with a rough-textured beige-and-white fabric. The posture-correct seat is mounted on a silent swivel that permits freedom of movement. Both Center and chair have tapered steel legs with noiseless glides.



Companion pieces to the Electronic Teaching Center are the Study-Center student desks. These have Amerflex seats, a plastic that flexes to body contour and then returns to shape. Seat moves back and forth and swivels up to 45 deg. in either direction. Both seat and book box are adjustable up and down. An outstanding feature is a three-position tilt top that can be adjusted flat for art work, at 8 or 20 deg. for reading and writing. Units save floor space (up to 25 per cent) and maintenance costs, yet have a light open design that compliments modern school architecture.

(For Further Details Circle Index Code 041)

ALL-ELECTRIC HEATING AND VENTILATING

Companion heating and ventilating units for classroom use are announced by Electromode, a division of Commercial Controls, Rochester, N. Y. The all-electric units come in two parts. The first one warms and recirculates inside air; the second draws in outside air and warms it. Both are controlled by thermostats. The manufacturer points out that the units eliminate the need for a boiler room, resulting in substantial savings in construction and over-all heating costs. Each room can be heated separately. Units are offered with interchangeable aluminum safety grids, with capacities up to 6000 watts, to meet demands of differing codes and weather zones. Matching shelving is available for below window-sill installations.

(For Further Details Circle Index Code 042)

THREE LIGHTING SYSTEMS

Sunbeam Sightline lighting fixtures are used throughout the new school district administration building at Fontana, Calif. The modern, U-shaped building is comprised of three distinct wings each with separate lighting systems. The educational service wing, which requires maximum visual acuity, uses Sight-



School District Office

line P132, an indirect system of pendant mounted installations. The individual units, 8 ft. long, are installed in three continuous rows mounted on 12-ft. centers for uniform over-all brightness. Light measures 45 foot-candles on desk tops. Installation is simplified with the use of a snap-on suspension system involving a spring-loaded, self-leveling device and adjustable ballast. When mounted on a white acoustical ceiling, the plastic diffuser and all-white metal fixture blend with the ceiling color and are almost invisible to the eye. Series HSDP3804 fixtures in the main entrance and lobby are 4 ft. square, recessed fixtures that have a translucent white patterned Plexiglas diffuser. The fixtures are preassembled and prewired for ready connection to the circuit leads. The Sunbeam Lighting Co., Los Angeles 21, Calif., will supply more information.

(For Further Details Circle Index Code 043)

CEILING TILE HAS 2-HOUR FIRE RATING

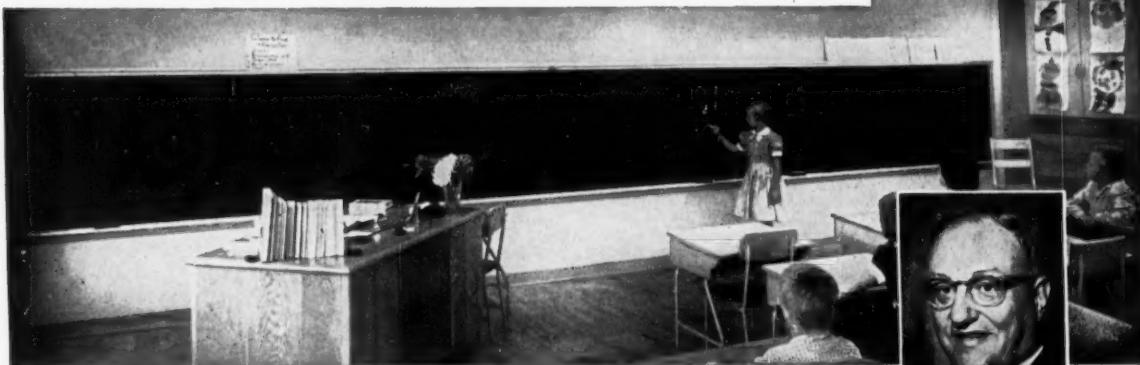
Fire-Guard is the first acoustical ceiling tile to gain a two-hour fire rating from Underwriters' Laboratory, Inc., according to the manufacturer, Armstrong Cork Co., Lancaster, Pa. The new ceiling tile has a noise reduction coefficient of .75. It provides effective fire protection for structural steel members and the floor or roof assembly under which it is installed. It affords enough protection for structural steel joists to carry their prescribed loads for more than six hours in a fire. Fire-Guard can be suspended directly from bar joists or carrying channels and requires only a 10 in. air space to meet qualifications of the two-hour rating. It is constructed of a densely packed mineral fiber and designed to allow interlocking of tiles. Each tile rests on a chip spline 3 1/2 in. long which is pre-snapped to a steel runner. Available now in a perforated design, other designs will be released soon.

(For Further Details Circle Index Code 044)

(Continued on page 70)

CORRESPONDING CODE INDEX NUMBERS TO BE ENCIRCLED CAN BE FOUND ON THE CARDS IN THE READER'S SERVICE SECTION

natural slate chalkboards



Union Terrace Elementary School - Allentown

Arch.: A. L. Wiesenberger, Assoc., Allentown



"First and Only Choice of the Allentown, Pa. School District"

. . . says Mr. Paul J. Fink, Assistant to the Superintendent of Schools



Midway Manor Elementary School - Allentown
Arch.: Heyl-Bond-Miller, Allentown



Muhlenberg Elementary School Addition - Allentown
Arch.: Lange & Everett, Allentown



South Mountain Junior High School - Allentown
Arch.: Heyl-Bond-Miller, Allentown



Vocational Annex to Senior High School - Allentown
Arch.: George E. Yundt, Allentown

"There is no substitute for the real thing! Nothing is easier on a child's eyes than the contrast of white chalk against a slate chalkboard. Words stand out crisp and clear . . . are quickly read by all."

"We have found Pennsylvania slate to be practically indestructible as we're still using some of the original slate boards in one of our recently renovated schools . . . boards installed when the school was built in 1886! After close to 70 years, these boards are still ably serving our students and teachers. What's more, they fit in perfectly with their new, modern surroundings. No wonder we are sold on slate and specify it in all our schools."

That's the feeling of Mr. Paul J. Fink of the Allentown School District. And the facts bear it out. Since 1950, this district has renovated or built additions to 7 elementary schools, built 2 new elementary schools and a junior high school, added a vocational annex to the senior high school, and construction is now under way for another new junior high school. In each case, natural slate chalkboards were specified.

Why not investigate slate chalkboards for your classrooms? You'll find for contrast, durability, easy maintenance . . . and timeless good looks . . . there is just no substitute for slate!

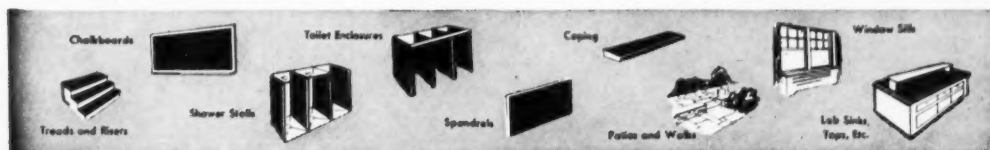
Inquiries welcomed on specific properties of slate. Write:

NATURAL SLATE BLACKBOARD CO.

THE STRUCTURAL SLATE CO. - pen argyl, pennsylvania

for your protection, insist on slate quarried in Pennsylvania

natural slate...500 million years in the making



News of Products . . .

(Continued from page 68)

BONDS NEW CONCRETE TO OLD

A long-standing construction problem—joining fresh wet concrete to cured concrete—has been solved by Uniweld, a new structural welding agent made by Permagile Corp. of America, New York City. A blend of epoxy and nylon-type synthetic resins, Uniweld forms a waterproof membrane over the entire bond area as well as a permanent high-strength bond, without any mechanical interlocking. It adheres to brick, stone, cinder block, gypsum block, and other commonly used construction materials. A thin coating of Uniweld can be rolled, brushed, or sprayed on any clean, nongreasy surface. Uniweld sets in 15 minutes, after which fresh concrete can

be poured directly on the treated surface. In most cases, a gallon will cover up to 200 sq. ft., at a cost as low as 5 cents per square foot, according to the makers. Suggested uses are: plastering directly to concrete and brick walls, water- and vapor-proofing concrete roofs, maintenance repairs of any concrete structure, and constructing precast concrete components.

(For Further Details Circle Index Code 045)

UTILIZES CEILING REFLECTIONS

A newly designed line of fluorescent fixtures is offered by Leadlight Fixture Co., Oakland, Calif. Feature of the line is a shallow, modular, open-top design with 24 by 48-in. vinyl bowl diffuser. The SSDVO series of fixtures may be mounted or suspended. Because the manufacturer has eliminated the steel top, the fixtures are lighter in weight and lower in cost. A

choice of four models, for either two or four lamps, is offered.

(For Further Details Circle Index Code 046)

FAST SNACK SERVICE

Even the most inexperienced food service operators can provide fast food and drink service by using the new Quick-Serv Sani-Snack Bar. Measuring 13½ by 7½ ft., the unit comes complete with nationally known, stainless steel or aluminum equipment for food and



All-in-One Snack Bar

fountain service. It has a soft ice cream freezer for dispensing cones, four milk shake machines, a syrup rail with chocolate pump and four jars, three-pan hot food well, sandwich machine, salad refrigeration compartment, soft drink dispenser, and a cabinet with three sinks. Completely pre-wired, the unit needs only final outlet wiring and simple plumbing connections. It comes complete with signs and a Formica-topped counter available in a number of colors. The food bar is available in standard or custom designs from General Equipment Mfg. & Sales, Inc., Indianapolis.

(For Further Details Circle Index Code 047)

WALL-MOUNTED WATER COOLER

The Halsey W. Taylor Co., Warren, Ohio, announces a new Wall-Mount water cooler. Off-the-floor mounting with no outside plumbing



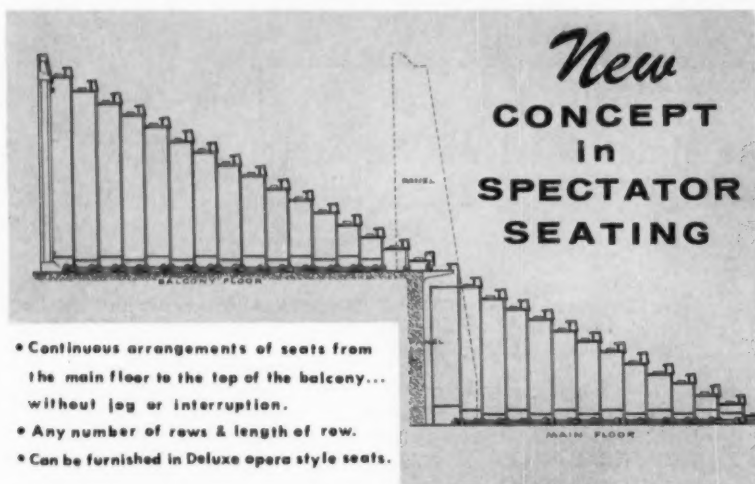
No Visible Plumbing

ing connections eliminates dirt traps and solves major cleaning and maintenance problems. A one-piece stainless steel splash-back and contoured bowl provides durability and is another easy maintenance feature. Wall-Mount is available in three sizes to hold 6, 11, or 16 gallons of cooled water. More information can be obtained from the manufacturers.

(For Further Details Circle Index Code 048)

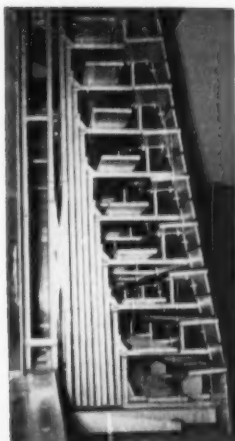
(Continued on page 72)

CORRESPONDING CODE INDEX NUMBERS TO BE ENCIRCLED CAN BE FOUND ON THE CARDS IN THE READER'S SERVICE SECTION



- Continuous arrangements of seats from the main floor to the top of the balcony... without jog or interruption.
- Any number of rows & length of row.
- Can be furnished in Deluxe opera style seats.

EZ-A-WAY FOLDING BLEACHERS



Here is a new concept in bleacher design for maximum spectator seating. In addition to its flexibility it has beauty in appearance. For example, the illustration shows what at first glance is a 31 row high installation . . . yet there are 13 rows on the main floor and the remainder go on up to the back of the balcony without jog or interruption.

Spectators can enter the bleachers from the balcony by use of the 34 inch walkway along the front of the balcony sections, designed also to provide easy exit from the balcony. For capacity crowds the walkway can be converted to additional seats, so that all the balcony space becomes spectator seating.

When closed there is a continuous face so that on occasions only the bleachers on the main floor need be extended. These continuous design EZ-A-WAY bleachers may be equipped with the OMEGA drive unit for simple, easy operation.

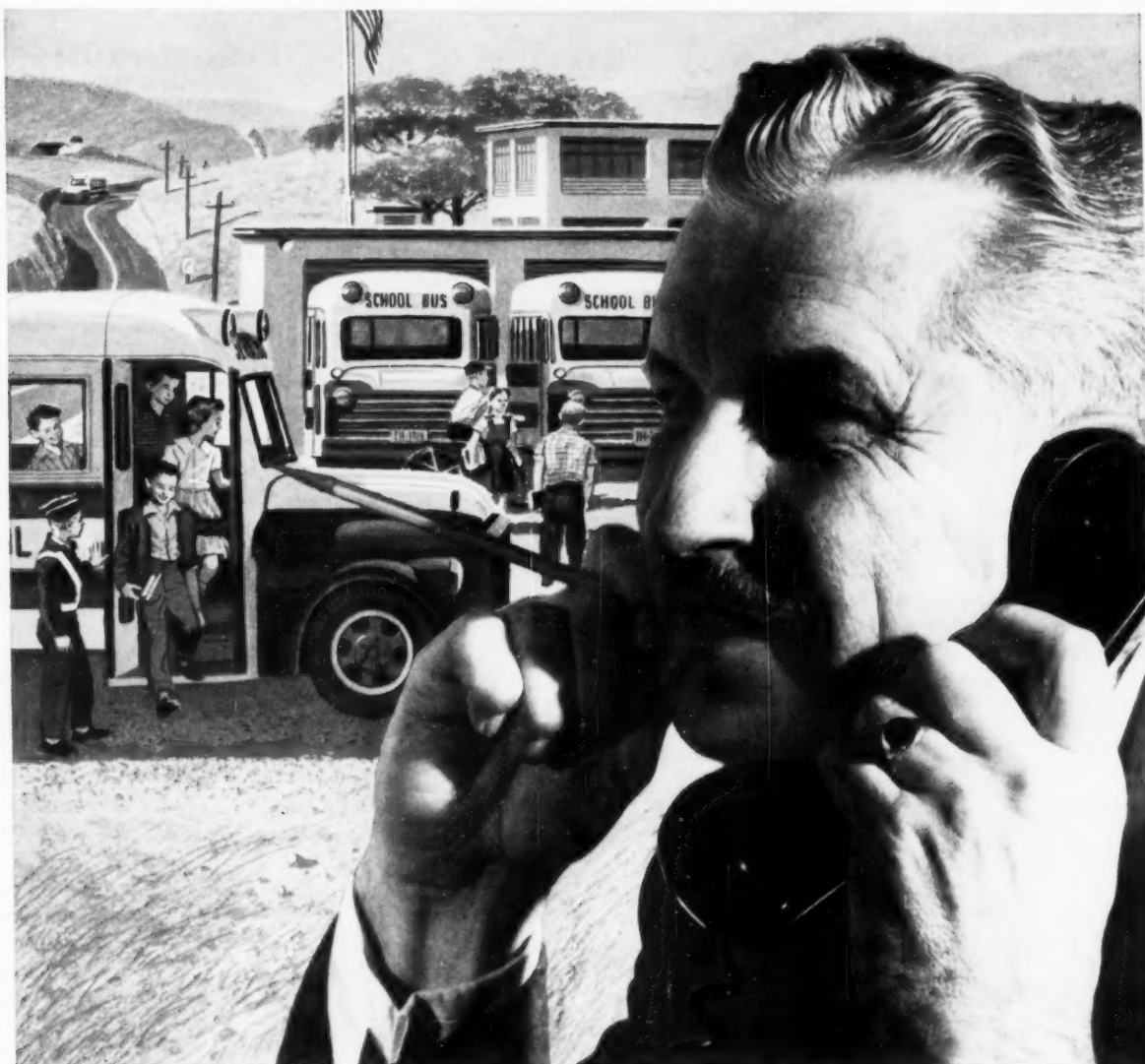
They're so definitely new in bleacher design conception you'll want complete details. Write or wire today.

BERLIN
SEATING
ENGINEERS

BERLIN CHAPMAN COMPANY
BERLIN, WISCONSIN

A Division of Consolidated Foundries
And Manufacturing Corp.

The man with the sharp pencil picks Firestone!



AND GETS MORE MILEAGE OUT OF SCHOOL TAX DOLLARS!

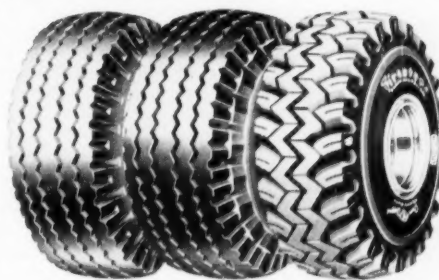
Look to Firestone School Bus Tires for maximum mileage and performance. Firestone Rubber-X, the longest wearing rubber ever used in Firestone tires, is specially compounded for bus tires. And with S/F (Safety-Fortified) cord, Firestone School Bus Tires give you extra miles of safe, dependable service. There's a tubeless or tubed Firestone tire for every road condition, every budget. Firestone Transports are tops for minimum budgets. If you want maximum mileage, at a small added investment, Firestone Super Transports will bring you 50% more mileage. And Firestone Super All Traction tires are built for maximum traction in any weather on all types of roads. Your Firestone Dealer or Store will help you analyze your bus tire needs. Be sure to specify Firestones on all new buses—you'll increase passenger safety and save school tax dollars, too!

*FIRESTONE T. M.

Enjoy the Voice of Firestone on ABC television every Monday evening.

Copyright 1959, The Firestone Tire & Rubber Company

SCHOOL BOARD JOURNAL for APRIL, 1959



TRANSPORT* SUPER TRANSPORT* SUPER ALL TRACTION*

Firestone

BETTER RUBBER FROM START TO FINISH

(For more information from advertisers, use the postcard on page 77)

Torjesen

"WALL-A-WAY" FOLDING PARTITIONS



ELECTRICAL OR MANUAL OPERATION
TO DIVIDE GYMNASIUMS, AUDITORIUMS
CLASSROOMS, OFFICES, ETC.

NOW—for the same price as duck,
you can have a Vinyl or "Toroply"
covered partition that cuts mainten-
ance costs 75% to 80%.

Send for detailed catalog with list
of local representatives

TORJESEN, INC.

209-25th St., Brooklyn 32, N.Y.
Telephone: SOuth 8-1020

News of Products . . .

(Continued from page 70)

ECONOMICAL FURNITURE LINE

The American Desk Mfg. Co., Temple, Tex., has introduced several pieces of classroom furniture in its economy-priced Challenger series. There is an open-front student desk, a lift-lid desk, chair, and library table in the



Welded Steel Frame

series. The desks have welded steel frames and $\frac{3}{4}$ -in. fiber-plastic tops with pencil groove. Standard models are 21 to 29 in. high. Tops are either plywood or solid birch or maple. The table has a fiber-plastic top, and tubular steel legs, adjustable in 1-in. increments from 21 to 30 in. The lightweight chairs are of welded construction with canted tubular steel legs fitted with swivel glides to prevent

marring. Seats, 11 to 18 in. high, are contoured for comfort and posture control. The entire line is offered in metal finishes of light taupe, mint green, sea blue, coppertone, and mist gray.

(For Further Details Circle Index Code 049)

CHECKS ROOM TEMPERATURE

The new Multi-Switch Indicator, 9000 Series, is a compact switch box that rapidly checks room temperatures at as many as 108 stations. The instrument is a self-contained, null-balance unit that requires only the external sensing devices. The switch is made by the Wheelco Instruments Division of Barber-Colman Co., Rockford, Ill. A flip of the toggle switches will give swift, sensitive, and accurate readings of the temperature in any room. Accuracy is plus or minus $\frac{1}{4}$ of 1 per cent for all scale spans in the pyrometric range. The indicator uses an 11-in. scale with either or both Fahrenheit and Centigrade readings. Although engineers will use the switch to indicate routine heating and air-conditioning needs, it is also an important fire-control device, since any unusually high reading would indicate a fire.

(For Further Details Circle Index Code 050)

FIRE-RETARDANT CHEMICALS

Combustible interior finishes should be treated with tested, approved fire retardants as an added fire safety precaution. The Flamort Chemical Co., 746 Natoma St., San Francisco 3, Calif., supplies a wide variety of tested and approved fire-retardant chemicals for treating wood, plywood, acoustical or insulation boards, fabrics and textiles used in

(Concluded on page 74)

**CORRESPONDING CODE INDEX NUMBERS TO
BE ENCIRCLED CAN BE FOUND ON THE CARDS
IN THE READER'S SERVICE SECTION**

Be Thrifty

Get the
HOLDEN
Habit —
It Pays!

Textbooks are recognized as the major tools in any educational system and if one wishes to get the Maximum Service from a textbook, a **BOOK COVER** is a necessity.

HOLDEN BOOK COVERS have been recognized as the Standard for over 80 years. The name "**HOLDEN**" on a Book Cover is a Guarantee of Quality.

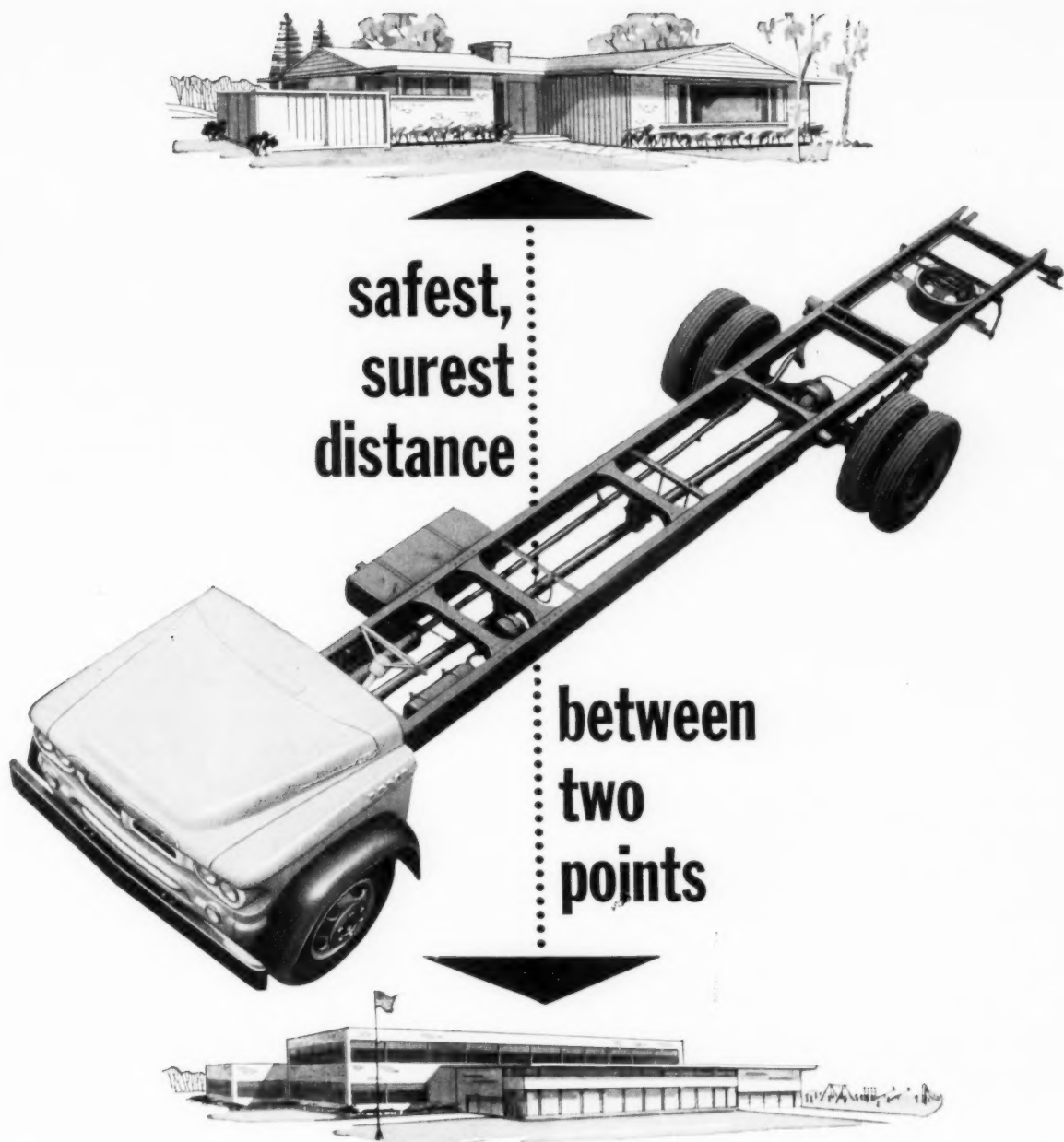
HOLDEN BOOK COVERS are made of paper especially designed to withstand the scuffing and hard usage incidental to classroom use.

They are made in nine different sizes to provide a close fitting jacket for all textbooks, regardless of size.

The right angle fold on the Cover is a guide to proper adjustment and the Cover stays on the book until deliberately removed.

HOLDEN COVERS prolong the life of the book up to three years, which means a substantial per pupil saving.

Holden Patent Book Cover Company
Springfield, Massachusetts



New 1959 DODGE School Bus Chassis

Never has there been a school bus chassis quite so safe and dependable as this, the 1959 Dodge.

Dodge meets or surpasses all N.E.A. standards, of course, and gives you such *safety bonuses* as: oversized brakes with vacuum boosters; a driver-adjustable hand brake; dual headlights and blow-out-resistant tubeless tires.

'59 Dodge engines yield up to 218 hp. on thrifty

regular gas . . . perform always with traditional dependability. Drivers like Dodge for the sure, easy way it handles . . . especially with new Torqmatic transmission, now available for most models. The *kids* like Dodge for the smooth, comfortable way it rides.

Your Dodge dealer will gladly give you the whole story, along with some good news on price. Phone or visit him soon.

Today, it's real smart to choose DODGE trucks

News of Products . . .

(Concluded from page 72)

interior decorations and furnishings. Protection of building interiors lasts almost indefinitely, while building exteriors require a periodical weatherproof coating over the fire-retardant chemical, according to the manufacturers. Numerous types and grades of chemicals, each applicable to a specific material, are offered. All comply with federal specifications and are listed by Underwriters' Laboratories. A letter to the company outlining your specific requirements will bring full information.

(For Further Details Circle Index Code 051)

FLUORIDE UNIT FOR FAUCET

Any drinking water fountain or faucet can supply fluoridated drinking water with this compact attachment by Haws Drinking Faucet Co., Berkeley, Calif. Model FL-1 Fluoride unit consists of a fluoride source tank and



Tank and Filter Control

proportioning filter, inconspicuously mounted beneath or behind the fountain on the water supply line. The tank contains mineral Fluor-spar, enough to fluoridate a fountain's drinking water for 20 years. No technical controls are required after installation. Water "percolates" through the mineral and is readmitted to the general supply lines in proper proportions. The manufacturer states that no dangerous concentration of fluoride can result in the system. Send for details on single and dual faucet models.

(For Further Details Circle Index Code 052)

"ARTIST, CRITIC & TEACHER" 2/6d (40¢)
Lindsay Anderson, Kenneth Tynan, John Berger, Brian Broombridge, Christopher Logue.

Also still available a few copies of our
Whitsun Report:

"ART SCIENCE & EDUCATION" 5/- (60¢)

Both illustrated; both compiled by
John Morley.

A new Study in Methods and Attitudes.

Send To: H. E. Lobstein, Secretary, JOINT COUNCIL
FOR EDUCATION THROUGH ART, 12 The Green,
Jordans, Beaconsfield, Bucks., England.

TIGHT BUILDING BUDGET?



ONE CENTRAL KITCHEN
prepares Food for all your schools
WRITE FOR FULL DETAILS . . .

LINCOLN MFG. CO., INC.
P.O. Box 2313 • Dept. C, Fort Wayne, Ind.

SMOOTH RIDING AND FAST PERFORMING MOWER

Improved performance is promised with the redesigned 24 in. rider-mower by the Devere Co., Racine, Wis. Built-in free-wheeling quickly disengages for use in moving mower when the engine is off. Front axle knee action



Attachments Available

provides rapid even cutting, prevents tilting, and provides constant traction on uneven ground. Ten speeds forward, plus reverse, with speed ranges of from 1.84 to 5.84 mph. permits low speed trimming and close side trims. The low ground speed combined with high blade speed provides cutting power needed for dense, tall growth. Engine adjustments have been simplified by the new body design. The machine can be used for towing heavy equipment, such as seeders, spreaders, or rollers. Write for more details.

(For Further Details Circle Index Code 053)

NEATER SURFACE SWITCH

Powers Regulator Co., Skokie, Ill., has announced a new actuator mechanism. The switch is 20 per cent smaller than earlier models, allowing more compact flush and surface mounting. It controls remotely the flow of air in air-conditioning, heating, and ventilating equipment. Including the faceplate, the switch measures $2\frac{3}{8}$ by $3\frac{3}{8}$ by $2\frac{1}{4}$ in. It is supplied with flexible air hoses. Three standard dial styles are available, plus optional special dial plates. Send for Bulletin 357-3.

(For Further Details Circle Index Code 054)

FOR EDGING LAWNS

Up to 80 miles of turf can be edged in a day with a tractor-drawn Kurb-Dresser developed by K-D Mfg. Co., Cleburne, Tex. Operating at speeds up to 15 mph., the heavy duty edger neatly and efficiently trims unruly grass runners or turf build-up (wet or dry) on streets, driveways, curbs, sidewalks, or any paved surfaces bordered by turf. It can flush-cut adjacent to curb, or cut a trough 1 in. wide and 4 in. deep simultaneously. Kurb-Dresser's cutting blade automatically holds a steady course even when the tractor path deviates as much as 16 inches. A nonspinning cutting blade protects the operator and bystanders from flying debris. Anyone who can drive a tractor can operate the machine.

(For Further Details Circle Index Code 055)

ALL-WEATHER WASTE RECEIVER

A self-closing waste receptacle, offered at a new low price, is manufactured by Bennett Mfg. Co., Alden, N. Y. Bennett Model 144 has self-closing swing doors equipped with

spring hinges that close doors when not in use, yet open at a finger touch. Rubber bumpers provide quiet closing. The 18 by 32-in. receptacle can be used out of doors, as the top is treated to resist outdoor weather conditions. Constructed of heavy-gauge steel, it is finished in special outdoor baked enamel in green and white. Each receptacle is lined with a burlap bag attached by grommets and hooks for sanitation and easy cleaning.

(For Further Details Circle Index Code 056)

CATALOGS AND BOOKLETS

"School Administration Records and Equipment" is a new 44-page handbook from Remington Rand Division of Sperry Rand Corp., New York City. The well-illustrated brochure describes the record-keeping systems, equipment, and supplies needed for the efficient management of a modern school. The firm's full line of school equipment is detailed. School administrators should not neglect to send for this informative catalog.

(For Further Details Circle Index Code 057)

The new Maso line of office and school furniture and equipment from Interstate Metal Products Co., Inc., Chicago 11, Ill., is pictured in the firm's catalog. Also described is a laminated plastic chair mat for use on floors.

(For Further Details Circle Index Code 058)

Three series of new wardrobes, added to the line manufactured by Brunswick-Balke-Candler Co., Kalamazoo, Mich., are offered in a variety of colors and material combinations. Write for the catalog describing receding doors, pivoting doors, and folding doors on the new wardrobes.

(For Further Details Circle Index Code 059)

A complete line of adhesives and sealers for building and construction are shown in the catalog from the Adhesives, Coating and Sealers Div., Minnesota Mining & Manufacturing Co., St. Paul 6, Minn.

(For Further Details Circle Index Code 060)

A 28-page catalog from Reflector Hardware Corp., Melrose Park, Ill., describes the company's entire line of floor-to-ceiling structural merchandising systems. Write for the free illustrated catalog entitled "RHC Wallmaster Control of Space."

(For Further Details Circle Index Code 061)

The Research Dept. of Maple Flooring Mfgs. Assoc., Chicago 1, offers a free list of tested and approved floor finishing products.

(For Further Details Circle Index Code 062)

Insulated marble curtain walls are illustrated in the catalog from The Vermont Marble Co., Proctor, Vt. It lists the three basic types of marble paneling and their distinguishing details.

(For Further Details Circle Index Code 063)

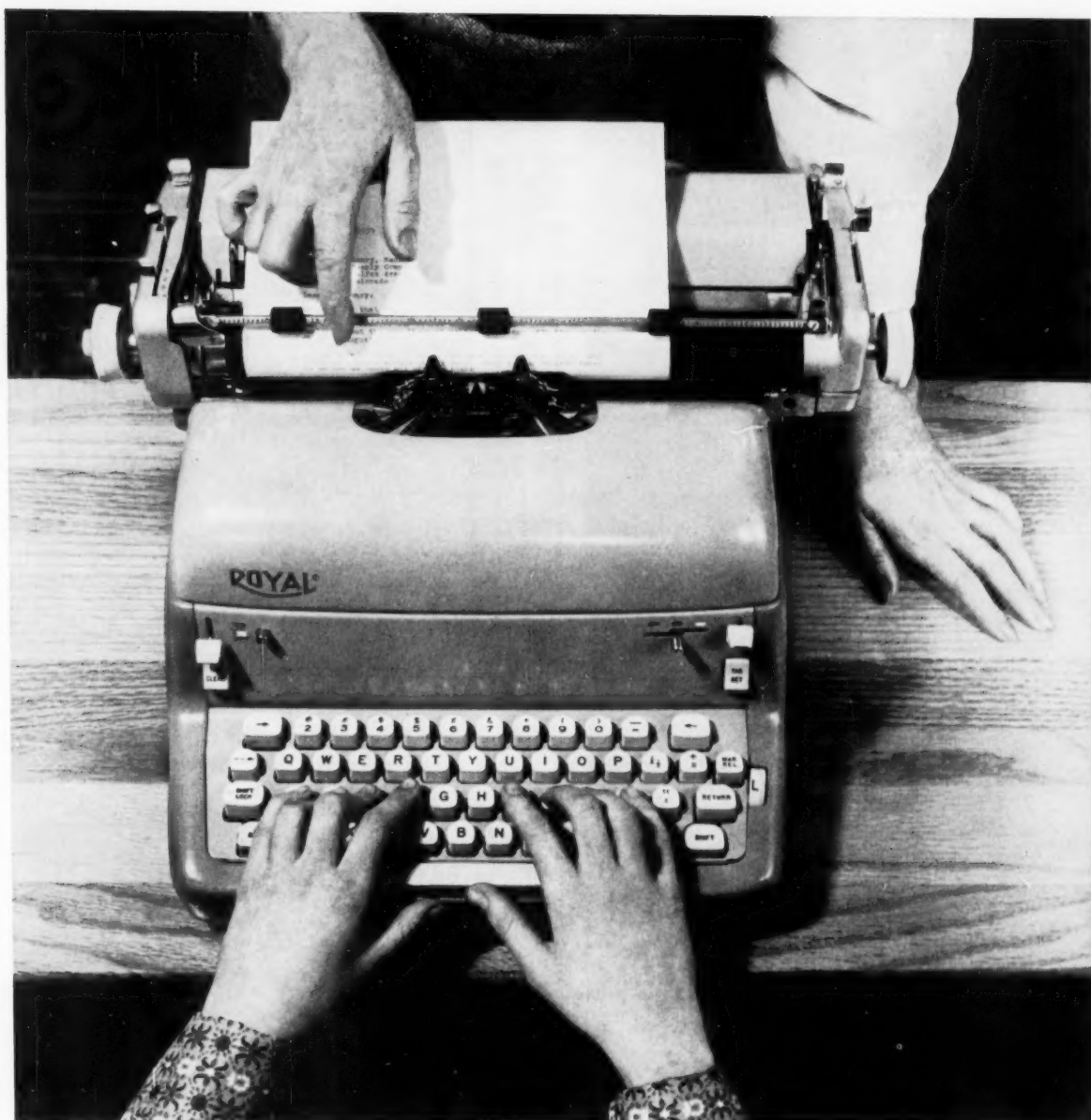
Kewaunee Mfg. Co., Adrian, Mich., has released an illustrated catalog which describes the laboratory furniture and equipment which is available for immediate delivery from the company. The catalog, called "Kem Tech Furniture," includes 8 science room plans with details for all pictured items.

(For Further Details Circle Index Code 064)

Heavy-duty gas ranges, deep-fat fryers, broilers, and other related items for institutional kitchens are described in "Morley Majestic," a catalog from The Morley Mfg. Co., Mascoutah, Ill.

(For Further Details Circle Index Code 065)

CORRESPONDING CODE INDEX NUMBERS TO BE ENCIRCLED CAN BE FOUND ON THE CARDS IN THE READER'S SERVICE SECTION



How to make beginners feel they're going to be good!

Teachers tell us it's extra-easy to teach and extra-easy to learn when a beginner is using a Royal Electric.

The keyboard is remarkably easy to master. Your students will spend even less time on key stroking and carriage drills to attain speed with accuracy. Margin setting is automatic with Royal's famous Magic® Margin.

Advanced students learn faster on Royal Electric. Our unique Touch Control® makes the change from man-

ual to electric typing a natural one.

Exclusive Twin-Pak® is the easiest of all ribbons to change—and it ends ribbon smudge once and for all. And, of course, all the controls are in the same familiar positions, including tabular and back-spacing keys.

Reliability is a Royal byword. There's little or no time off for repairs when you're using Royals. If any should be needed, they're done extra quickly, because Royal has more service points

than any other manufacturer.

You are the best judge of a teaching typewriter. We would like to give you a free demonstration and trial—won't you call your nearby Royal Representative today?

ROYAL electric

Product of Royal McBee Corporation,
World's Largest Manufacturer of Typewriters.

THERE ARE MORE ROYAL TYPEWRITERS IN SCHOOL AND OFFICE USE THAN ANY OTHER MAKE.

POUND FOR POUND...

Champion of the Class

The new R. C. Allen VisOmatic typewriters boast a built-in ability to take the heavy pounding and carriage-banging treatment of classroom use.

This day-in, day-out dependability . . . greatly reducing maintenance costs . . . makes the R. C. Allen VisOmatic the most preferred, practical and economical school typewriter investment.

But there's more, much more, to this new R. C. Allen VisOmatic. There's a new dual built-in card holder . . . fully automatic VisOmatic margins . . . New automatic ball . . . Velvet touch keyboard . . . Removable platen . . . Finger tip tab set and clear buttons . . . Half space escapement and margin justifier . . . plus 7 soft-tone, office-matching decor colors to choose from. Ask your local R. C. Allen dealer for a VisOmatic demonstration today.



**R.C. Allen
Business Machines, Inc.**

688 FRONT AVE., N. W., GRAND RAPIDS, MICH.



**YELLOW
PAGES**

Adding Machines • Bookkeeping Machines • Cash Registers
• Typewriters • Sales and Files • Carbon Paper and Ribbons
• Precision Aircraft Instruments

95

227 of the most reputable Audio-Visual dealers recommend Beseler's **VU-LYTE II** Opaque Projector!



AV Experts are in a position to know. Find out how YOUR School can improve the teaching process. Write for the new Free brochure: "Turn Teaching Into Learning"

CHARLES Beseler COMPANY
EAST ORANGE, NEW JERSEY



LINE ENGRAVING

COLOR PROCESS

HALF TONES

the premier engraving co.

AND ART STUDIO.

812 W. WINNEBAGO ST.
MILWAUKEE 5, WISCONSIN

READER'S SERVICE SECTION

INDEX TO SCHOOL EQUIPMENT

The index and digest of advertisements below will help you obtain free information, catalogs, and product literature from the advertisements and companies listed in the new products section. Merely encircle the code number assigned to each firm in the request form below, clip the form and mail it to THE AMERICAN SCHOOL BOARD JOURNAL. Your request will receive prompt attention.

For your free copy of Boles' "Sources of School Building Economy," which appeared in the May through December, 1958, JOURNAL, please check the box on the post card at the right, fill in your name and address and mail. No postage needed.

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42	American Desk Mfg. Co. 66 School furniture	421	Hillyard Chemical Company 65 Super Mil-Tone floor dressing
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48	Butler Manufacturing Company 7 Metal buildings	427	Lincoln Manufacturing Co. 74 Food service equipment
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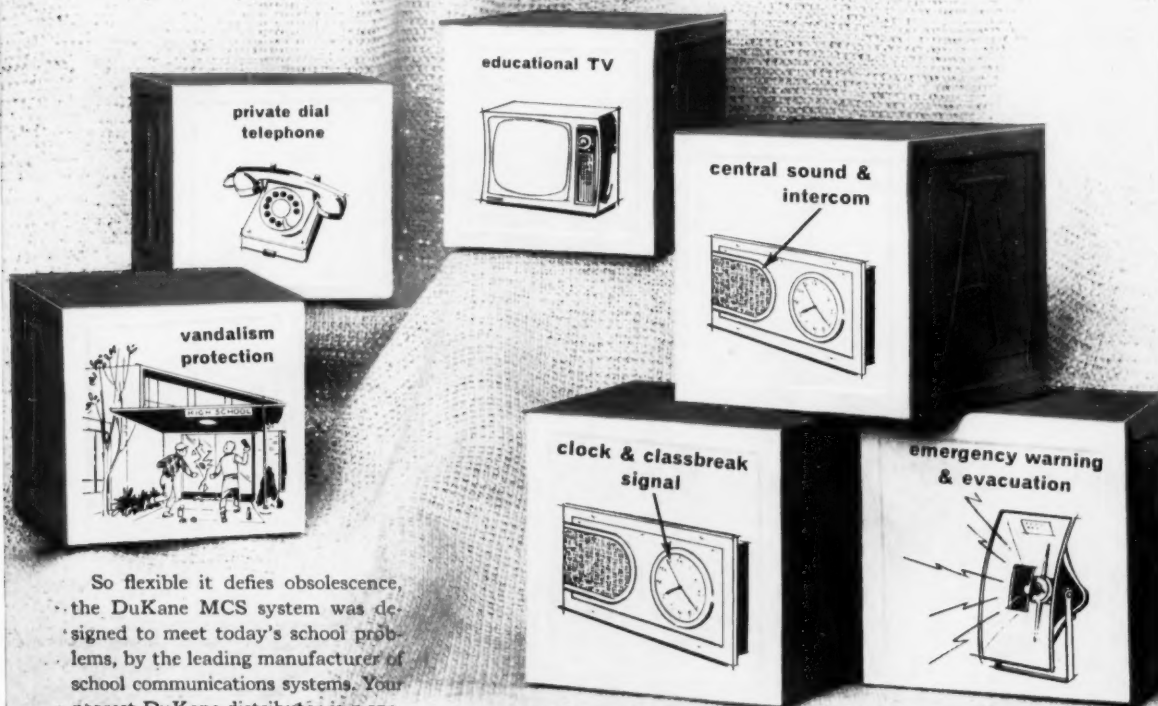
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